

2020 Index

IEEE Transactions on Nuclear Science

Vol. 67

This index covers all technical items—papers, correspondence, reviews, etc.—that appeared in this periodical during 2020, and items from previous years that were commented upon or corrected in 2020. Departments and other items may also be covered if they have been judged to have archival value.

The Author Index contains the primary entry for each item, listed under the first author's name. The primary entry includes the coauthors' names, the title of the paper or other item, and its location, specified by the publication abbreviation, year, month, and inclusive pagination. The Subject Index contains entries describing the item under all appropriate subject headings, plus the first author's name, the publication abbreviation, month, and year, and inclusive pages. Note that the item title is found only under the primary entry in the Author Index.

AUTHOR INDEX

A

- Abdo, D.**, see Magne, S., *TNS April 2020 617-624*
- Abe, S.**, see Kuroda, J., *TNS July 2020 1599-1605*
- Abe, S.**, see Liao, W., *TNS July 2020 1566-1572*
- Abouzeid, F.**, Gasiot, G., Soussan, D., de Boissac, C.L., Malherbe, V., Bertin, V., Lallement, G., Autran, J., and Roche, P., On-Chip Total Ionizing Dose Digital Monitor in Fully Depleted SOI Technologies; *TNS July 2020 1326-1331*
- Added, N.**, see de Oliveira, A.B., *TNS July 2020 1503-1510*
- Aded, N.**, see Gonzalez, C.J., *TNS March 2020 518-524*
- Adell, P.C.**, see Privat, A., *TNS July 2020 1332-1338*
- Agnello, S.**, see Girard, S., *TNS Jan. 2020 289-295*
- Aguiar, V.A.P.**, see de Oliveira, A.B., *TNS July 2020 1503-1510*
- Aguiar, V.A.P.**, see Gonzalez, C.J., *TNS March 2020 518-524*
- Aguiar, Y.Q.**, Wrobel, F., Autran, J., Kastensmidt, F.L., Leroux, P., Saigne, F., Pouget, V., and Touboul, A.D., Exploiting Transistor Folding Layout as RHBD Technique Against Single-Event Transients; *TNS July 2020 1581-1589*
- Ahn, J.K.**, see Lee, I.S., *TNS Sept. 2020 2143-2147*
- Akahori, T.**, see Watanabe, T., *TNS Aug. 2020 1835-1845*
- Akiba, K.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Akkerman, A.**, Barak, J., and Murat, M., A Survey of the Analytical Methods of Proton-NIEL Calculations in Silicon and Germanium; *TNS Aug. 2020 1813-1825*
- Al Helou, N.**, see Benabdesselam, M., *TNS July 2020 1663-1668*
- Al Sudani, T.**, see Biasi, G., *TNS March 2020 534-540*
- Alarcon, R.**, see Scheuer, K., *TNS Aug. 2020 1846-1851*
- Alborini, A.**, see Tartoni, N., *TNS Aug. 2020 1952-1961*
- Alcalde Bessia, F.**, Flandre, D., Andre, N., Irazoqui, J., Perez, M., Berisso, M.G., and Lipovetzky, J., Ultralow Power Ionizing Dose Sensor Based on Complementary Fully Depleted MOS Transistors for Radiotherapy Application; *TNS Oct. 2020 2217-2223*
- Alemanno, F.**, see Wei, Y., *TNS June 2020 939-945*
- Alessi, A.**, see Morana, A., *TNS Jan. 2020 305-311*
- Alessi, A.**, see Girard, S., *TNS Jan. 2020 289-295*
- Alessi, A.**, see De Michele, V., *TNS July 2020 1650-1657*
- Alexa, P.**, see Uhlir, R., *TNS Jan. 2020 382-388*
- Alexandrescu, D.**, see Alia, R.G., *TNS Jan. 2020 345-352*
- Alheyasat, A.**, see Torrens, G., *TNS May 2020 811-817*
- Ali, K.**, Ohgaki, H., Zen, H., Kii, T., Hayakawa, T., Shizuma, T., Toyokawa, H., Taira, Y., Iancu, V., Turturica, G., Ur, C.A., Fujimoto, M., and Katoh, M., Selective Isotope CT Imaging Based on Nuclear Resonance Fluorescence Transmission Method; *TNS Aug. 2020 1976-1984*
- Alia, R.G.**, see Kastriotou, M., *TNS Jan. 2020 63-70*
- Alia, R.G.**, Tali, M., Brugger, M., Cecchetto, M., Cerutti, F., Cononetti, A., Danzeca, S., Esposito, L., Fernandez-Martinez, P., Gilardoni, S., Infantino, A., Kastriotou, M., Kerboub, N., Lerner, G., Wyrwoll, V., Ferlet-Cavrois, V., Boatella, C., Javanainen, A., Kettunen, H., Morilla, Y., Martin-Holgado, P., Gaillard, R., Wrobel, F.,
- Cazzaniga, C.**, Alexandrescu, D., Glorieux, M., and Puchner, H., Direct Ionization Impact on Accelerator Mixed-Field Soft-Error Rate; *TNS Jan. 2020 345-352*
- Alia, R.G.**, see Cazzaniga, C., *TNS Jan. 2020 175-180*
- Alia, R.G.**, see Di Francesca, D., *TNS Jan. 2020 140-145*
- Alia, R.G.**, see Bagatin, M., *TNS July 2020 1421-1427*
- Alia, R.G.**, see Martinella, C., *TNS July 2020 1381-1389*
- Alia, R.G.**, see Bilko, K., *TNS July 2020 1682-1690*
- Alia, R.G.**, see Coronetti, A., *TNS July 2020 1606-1613*
- Alia, R.G.**, see Wyrwoll, V., *TNS July 2020 1590-1598*
- Alia, R.G.**, see Wyrwoll, V., *TNS July 2020 1530-1539*
- Allanche, T.**, see Dewitte, H., *TNS July 2020 1284-1292*
- Allen, C.N.**, see Whittaker, C., *TNS June 2020 1040-1044*
- Allen, M.**, see Loveless, T.D., *TNS Jan. 2020 99-107*
- Alles, M.L.**, see Brewer, R.M., *TNS Jan. 2020 108-115*
- Alles, M.L.**, see Johnson, R.A., *TNS Jan. 2020 135-139*
- Alles, M.L.**, see Ball, D.R., *TNS Jan. 2020 22-28*
- Allinei, P.**, see Bottau, V., *TNS April 2020 575-584*
- Allinei, P.**, see Marchais, T., *TNS April 2020 654-661*
- Alorda, B.**, see Torrens, G., *TNS May 2020 811-817*
- Ambrozic, K.**, see Gruel, A., *TNS April 2020 559-567*
- Amburkin, D.M.**, see Sotskov, D.I., *TNS Nov. 2020 2396-2404*
- Amburkin, K.M.**, see Sotskov, D.I., *TNS Nov. 2020 2396-2404*
- Aminalragia-Giamini, S.**, see Hands, A.D.P., *TNS Jan. 2020 181-190*
- An, Q.**, see Fan, Y., *TNS Oct. 2020 2246-2254*
- An, X.**, see Ren, Z., *TNS July 2020 1320-1325*
- Anastasio, A.**, see Mastroianni, S., *TNS May 2020 832-839*
- Andeen, T.**, see Xu, R., *TNS April 2020 698-707*
- Andre, N.**, see Alcalde Bessia, F., *TNS Oct. 2020 2217-2223*
- Andrieu, F.**, see Riffaud, J., *TNS Oct. 2020 2172-2178*
- Anh, N.N.**, see Hung, D.T., *TNS Oct. 2020 2224-2230*
- Anh, N.T.**, see Hung, D.T., *TNS Oct. 2020 2224-2230*
- Anniyev, T.**, Vasilyev, M., Khabashesku, V., and Inanc, F., High-Temperature Diamond Detector for Neutron Generator Output Monitoring in Well Logging Applications; *TNS Aug. 2020 1885-1892*
- Anton, G.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Arbutina, D.**, and Vasic-Milovanovic, A., Improving the Geiger Muller Counter Characteristics by Optimizing the Anode and Cathode Radius Dimensions; *TNS Oct. 2020 2231-2237*
- Archer, D.E.**, see Nicholson, A.D., *TNS Aug. 2020 1968-1975*
- Ariesanti, E.**, see Hawrami, R., *TNS June 2020 1020-1026*
- Arnquist, I.J.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Arounassalame, V.**, see Cheymol, G., *TNS April 2020 669-678*
- Arounassalame, V.**, see Cheymol, G., *TNS June 2020 1195*
- Arslanbekov, R.R.**, see Johnson, R.A., *TNS Jan. 2020 135-139*
- Artola, L.**, see Caron, P., *TNS Jan. 2020 44-49*
- Artola, L.**, see Hubert, G., *TNS Jan. 2020 201-209*
- Aryal, P.**, Khan, A., Kim, H.J., Vuong, P.Q., Kaewkhao, J., Kothan, S., and Kaewjaeng, S., Development of Tin-Based Single Crystal Scintillator for Double-Beta Decay Experiments; *TNS June 2020 922-926*
- Ashgari, A.**, Dazeley, S., and Bernstein, A., A Plutonium Mass Uncertainty Assessment Using a Cherenkov-Based Neutron Multiplicity Water Detector; *TNS Nov. 2020 2431-2438*
- Ashton, J.P.**, see Moxim, S.J., *TNS Jan. 2020 228-233*
- Ashton, J.P.**, see Harmon, N.J., *TNS July 2020 1669-1673*

- Assaf, M.**, see Haran, A., *TNS Aug. 2020 1803-1812*
- Atanov, N.**, Baranov, V., Budagov, J., Caiulo, D., Cervelli, F., Colao, F., Cordelli, M., Corradi, M., Davydov, Y.I., Falco, S.D., Diociaiuti, E., Donati, S., Donghia, R., Echenard, B., Giovannella, S., Glagolev, V., Grancagnolo, F., Happacher, F., Hitlin, D., Martini, M., Miscetti, S., Miyashita, T., Morescalchi, L., Murat, P., Pedreschi, E., Pezzullo, G., Porter, F., Raffaelli, F., Ricci, M., Saputi, A., Sarra, I., Spinella, F., Tassielli, G., Tereshchenko, V., Usubov, Z., Vasilyev, I.I., and Zhu, R.Y., The Mu2e e.m. Calorimeter: Crystals and SiPMs Production Status; *TNS June 2020 978-982*
- Atanov, N.**, Davydov, Y., Glagolev, V., Tereshchenko, V., Nechaev, D., Ivanov, S., and Jmerik, V., A Photomultiplier With an AlGaIn Photocathode and Microchannel Plates for BaF₂ Scintillator Detectors in Particle Physics; *TNS July 2020 1760-1764*
- Atias, L.**, see Haran, A., *TNS Aug. 2020 1803-1812*
- Atif, Z.**, see Shin, C.D., *TNS Sept. 2020 1996-2002*
- Aubert, D.**, see Ribiere, M., *TNS July 2020 1722-1731*
- Aubry, M.**, Ladaci, A., Girard, S., Mescia, L., Laurent, A., Robin, T., Cadier, B., Boutillier, M., Mekki, J., Morana, A., Campanella, C., Vidalot, J., Marin, E., Ouerdane, Y., and Boukenter, A., Radiation Effects on WDM and DWDM Architectures of Pre-amplifier and Boost-Amplifier; *TNS Jan. 2020 278-283*
- Aubry, M.**, Costes-Ori, V., Standarovski, D., and Ecoffet, R., Analysis of the Drift of the South Atlantic Anomaly From ICARE and SEM-2 Flight Data; *TNS July 2020 1251-1255*
- Auden, E.C.**, Quinn, H.M., Wender, S.A., O'Donnell, J.M., Lisowski, P.W., George, J.S., Xu, N., Black, D.A., and Black, J.D., Thermal Neutron-Induced Single-Event Upsets in Microcontrollers Containing Boron-10; *TNS Jan. 2020 29-37*
- Auffray, E.**, see Tomanova, K., *TNS June 2020 933-938*
- Augusto, O.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Aune, S.**, see Azmoun, B., *TNS Aug. 2020 1869-1876*
- Austin, R.A.**, Sierawski, B.D., Reed, R.A., Schrimpf, R.D., Galloway, K.F., Ball, D.R., and Witulski, A.F., Inclusion of Radiation Environment Variability for Reliability Estimates for SiC Power MOSFETs; *TNS Jan. 2020 353-357*
- Autran, J.**, and Munteanu, D., Atmospheric Neutron Radiation Response of III-V Binary Compound Semiconductors; *TNS July 2020 1428-1435*
- Autran, J.**, see Abouzeid, F., *TNS July 2020 1326-1331*
- Autran, J.**, see Aguiar, Y.Q., *TNS July 2020 1581-1589*
- Ayvazyan, V.**, see Bellandi, A., *TNS May 2020 762-767*
- Ayvazyan, V.**, see Cichalewski, W., *TNS Sept. 2020 2119-2127*
- Azambuja, J.R.**, see Goncalves, M.M., *TNS July 2020 1573-1580*
- Azimi, S.**, see Sterpone, L., *TNS Sept. 2020 2034-2041*
- Azmoun, B.**, Aune, S., Dehmelt, K., Deshpande, A., Fan, W., Garg, P., Hemmick, T.K., Kebbiri, M., Kiselev, A., Mandjavidze, I., Pereira-Da-Costa, H., Perez-Lara, C.E., Purschke, M.L., Revolte, M., Vandenbroucke, M., and Woody, C., Design Studies of High-Resolution Readout Planes Using Zigzags With GEM Detectors; *TNS Aug. 2020 1869-1876*
- Azuma, T.**, see Kodama, S., *TNS June 2020 1055-1062*
- B**
- Baba, S.**, see Kobayashi, D., *TNS Jan. 2020 328-335*
- Babin, V.**, see Ueno, M., *TNS June 2020 1045-1048*
- Babin, V.**, see Sakthong, O., *TNS Oct. 2020 2295-2299*
- Back, J.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Badhrees, I.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Baeg, S.**, see Bak, G., *TNS Nov. 2020 2370-2381*
- Bagatin, M.**, Gerardin, S., Paccagnella, A., Beltrami, S., Costantino, A., Poivey, C., Santin, G., Ferlet-Cavrois, V., Cazzaniga, C., and Frost, C., A Heavy-Ion Detector Based on 3-D NAND Flash Memories; *TNS Jan. 2020 154-160*
- Bagatin, M.**, Ferlet-Cavrois, V., Gerardin, S., Muschitiello, M., Paccagnella, A., Costantino, A., Santin, G., Boatella Polo, C., Alia, R.G., Fernandez Martinez, P., and Kastriotou, M., Characterizing High-Energy Ion Beams With PIPS Detectors; *TNS July 2020 1421-1427*
- Bagatin, M.**, see Cecchetto, M., *TNS July 2020 1412-1420*
- Bahamonde Castro, C.**, see Cecchetto, M., *TNS July 2020 1412-1420*
- Bahout, J.**, see Benabdesselam, M., *TNS July 2020 1663-1668*
- Bahout, J.**, Ouerdane, Y., Hamzaoui, H.E., Bouwmans, G., Bouzaoui, M., Cassez, A., Baudelle, K., Habert, R., Morana, A., Boukenter, A., Girard, S., and Capoen, B., Remote Measurements of X-Rays Dose Rate Using a Cerium-Doped Air-Clad Optical Fiber; *TNS July 2020 1658-1662*
- Bak, G.**, and Baeg, S., Failure Analysis of Galaxy S7 Edge Smartphone Using Neutron Radiation; *TNS Nov. 2020 2370-2381*
- Balb, R.**, see Klingbeil, H., *TNS Jan. 2020 361-368*
- Baldwin, J.**, see Vernon, E., *TNS April 2020 752-759*
- Balen, T.R.**, see Gonzalez, C.J., *TNS March 2020 518-524*
- Ball, D.R.**, see Johnson, R.A., *TNS Jan. 2020 135-139*
- Ball, D.R.**, see Austin, R.A., *TNS Jan. 2020 353-357*
- Ball, D.R.**, Galloway, K.F., Johnson, R.A., Alles, M.L., Sternberg, A.L., Sierawski, B.D., Witulski, A.F., Reed, R.A., Schrimpf, R.D., Hutson, J.M., Javanainen, A., and Lauenstein, J., Ion-Induced Energy Pulse Mechanism for Single-Event Burnout in High-Voltage SiC Power MOSFETs and Junction Barrier Schottky Diodes; *TNS Jan. 2020 22-28*
- Ballabriga, R.**, see Kremastiotis, I., *TNS Oct. 2020 2263-2272*
- Balland, C.**, see Campanella, C., *TNS July 2020 1643-1649*
- Baltic, G.M.**, see Pritchard, K., *TNS Jan. 2020 414-421*
- Ban, J.**, see Xu, R., *TNS April 2020 698-707*
- Ban, S.**, see Nakamura, K.Z., *TNS July 2020 1772-1776*
- Bandara, R.M.L.**, see Thirimanne, H.M., *TNS Oct. 2020 2238-2245*
- Bandstra, M.S.**, Joshi, T.H.Y., Bilton, K.J., Zoglauer, A., and Quiter, B.J., Modeling Aerial Gamma-Ray Backgrounds Using Non-negative Matrix Factorization; *TNS May 2020 777-790*
- Bandstra, M.S.**, see Vavrek, J.R., *TNS Nov. 2020 2421-2430*
- Barak, J.**, see Akkerman, A., *TNS Aug. 2020 1813-1825*
- Baranov, V.**, see Atanov, N., *TNS June 2020 978-982*
- Barbeau, P.S.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Barbero, J.**, see Nuns, T., *TNS July 2020 1263-1272*
- Barbero, M.**, see Habib, A., *TNS Feb. 2020 455-463*
- Barbieri, D.**, see Giordano, R., *TNS Aug. 2020 1852-1860*
- Barbot, L.**, see Ben Mosbah, M., *TNS April 2020 662-668*
- Barcelo, S.**, see Torrens, G., *TNS May 2020 811-817*
- Barillot, C.**, see Bourdarie, S., *TNS Oct. 2020 2196-2202*
- Barnaby, H.J.**, see Privat, A., *TNS July 2020 1332-1338*
- Baron, S.**, see Mendes, E., *TNS March 2020 473-481*
- Barraud, S.**, see Riffaud, J., *TNS Oct. 2020 2172-2178*
- Barrillon, P.**, see Habib, A., *TNS Feb. 2020 455-463*
- Bartlett, K.D.**, see Watts, M.M., *TNS March 2020 525-533*
- Basaglia, T.**, Pia, M.G., and Saracco, P., Evolutions in Photoelectric Cross Section Calculations and Their Validation; *TNS March 2020 492-501*
- Baschirotto, A.**, see Bonaldo, S., *TNS July 2020 1302-1311*
- Basso, P.M.**, Santos, F.F.d., and Rech, P., Impact of Tensor Cores and Mixed Precision on the Reliability of Matrix Multiplication in GPUs; *TNS July 2020 1560-1565*
- Battiston, F.**, see Eleon, C., *TNS Sept. 2020 2096-2104*
- Baudelle, K.**, see Bahout, J., *TNS July 2020 1658-1662*
- Baudu, J.-.**, see Dewitte, H., *TNS July 2020 1284-1292*
- Baumann, R.C.**, see Oliveira, D., *TNS June 2020 1161-1168*
- Baylac, M.**, see Fabero, J.C., *TNS July 2020 1461-1469*
- Beauchemin, P.**, Real Time Data Analysis With the ATLAS Trigger at the LHC in Run-2; *TNS Sept. 2020 2128-2135*
- Beaucour, J.**, see Possamai Bastos, R., *TNS July 2020 1404-1411*
- Beaugendre, G.**, see Goiffon, V., *TNS Jan. 2020 234-244*
- Beaulieu, L.**, see Whittaker, C., *TNS June 2020 1040-1044*
- Beck, D.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Bedeschi, F.**, see Mastroianni, S., *TNS May 2020 832-839*
- Beitlerova, A.**, see Kucera, M., *TNS June 2020 1049-1054*
- Belanger-Champagne, C.**, Blackmore, E., Lindsay, C., Hoehr, C., and Trinczek, M., Simulation and Measurements of Collimator Effects in Proton and Neutron Radiation Testing for Single-Event Effects; *TNS Jan. 2020 161-168*
- Bell, Z.W.**, IEEE Transactions on Nuclear Science 2020 Best Paper Award; *TNS Aug. 2020 1778-1779*
- Bell, Z.W.**, Changing of the Guard: Introducing the New Senior Editor for Radiation Instrumentation Papers; *TNS Sept. 2020 1986*

- Bell, Z.W.**, Introducing the New Associate Editor for Accelerator Technology Papers; *TNS Nov. 2020 2302*
- Bell, Z.W.**, Announcing the New Associate Editor for Radiation Instrumentation Papers on Scintillators; *TNS Dec. 2020 2464*
- Bellandi, A.**, Ayvazyan, V., Butkowski, L., Cichalewski, W., Dursun, B., Gumus, C., Omet, M., Pfeiffer, S., Onken, R., Rybaniec, R., Schmidt, C., Vogel, V., and Branlard, J., Results on FPGA-Based High-Power Tube Amplifier Linearization at DESY; *TNS May 2020 762-767*
- Belloir, J.**, see Goiffon, V., *TNS Jan. 2020 234-244*
- Belloir, J.**, see Le Roch, A., *TNS Jan. 2020 268-277*
- Belloir, J.**, see Le Roch, A., *TNS July 2020 1241-1250*
- Belov, V.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Beltrami, S.**, see Bagatin, M., *TNS Jan. 2020 154-160*
- Ben Mosbah, M.**, Eleon, C., Passard, C., Loridon, J., Perot, B., Barbot, L., and Grassi, G., Performance Assessment of Amplification and Discrimination Electronic Devices for Passive Neutron Measurements; *TNS April 2020 662-668*
- Ben Zaid, A.**, Paulmier, T., Sarraillh, P., Dirassen, B., Rey, R., and Payan, D., Experimental and Numerical Study of Internal Charging on Spacecraft and Risks of Discharge on Floating Metallic Elements; *TNS Jan. 2020 191-200*
- Benabdesselam, M.**, Mady, F., Guttilla, A., Blanc, W., El Hamzaoui, H., Bouazaoui, M., Al Helou, N., Bahout, J., Bouwmans, G., and Capoen, B., Investigation of Thermoluminescence Properties of Potential Fibered-OSL Dosimeter Materials; *TNS July 2020 1663-1668*
- Benabdesselam, M.**, see Campanella, C., *TNS July 2020 1643-1649*
- Benassi, G.**, see Zambelli, N., *TNS Oct. 2020 2273-2277*
- Benevenuti, F.**, see de Oliveira, A.B., *TNS July 2020 1503-1510*
- Benites, L.A.C.**, see de Oliveira, A.B., *TNS July 2020 1503-1510*
- Bentaib, A.**, see Magne, S., *TNS April 2020 617-624*
- Berisso, M.G.**, see Alcalde Bessia, F., *TNS Oct. 2020 2217-2223*
- Bernhard, J.**, see Kastriotou, M., *TNS Jan. 2020 63-70*
- Bernstein, A.**, see Asghari, A., *TNS Nov. 2020 2431-2438*
- Bertin, V.**, see Abouzeid, F., *TNS July 2020 1326-1331*
- Bertrand, G.H.V.**, see Lynde, C., *TNS April 2020 679-687*
- Betta, G.D.**, see Ratti, L., *TNS July 2020 1293-1301*
- Bettati, A.**, see Zambelli, N., *TNS Oct. 2020 2273-2277*
- Bevins, J.E.**, see Quartemont, N.J., *TNS March 2020 482-491*
- Bezerra, F.**, see Caron, P., *TNS Jan. 2020 44-49*
- Bhat, S.**, see Habib, A., *TNS Feb. 2020 455-463*
- Bhatta, T.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Bhattacharjee, A.K.**, see John, A.K., *TNS March 2020 502-507*
- Bhattacharya, P.**, Brown, C., Sosa, C., Wart, M., Miller, S., Brecher, C., and Nagarkar, V.V., Tl_2ZrCl_6 and Tl_2HfCl_6 Intrinsic Scintillators for Gamma Rays and Fast Neutron Detection; *TNS June 2020 1032-1034*
- Bhuva, B.**, see Wender, S.A., *TNS June 2020 1114-1117*
- Bhuva, B.L.**, see Cao, J., *TNS July 2020 1436-1442*
- Bi, D.**, Xie, X., Zhu, H., Liu, C., Hu, Z., Zhang, Z., and Zou, S., A Special Total-Ionizing-Dose-Induced Short Channel Effect in Thin-Film PDSOI Technology: Phenomena, Analyses, and Models; *TNS Nov. 2020 2337-2344*
- Biasi, G.**, Su, F., Al Sudani, T., Corde, S., Petasecca, M., Lerch, M.L.F., Perevertaylo, V.L., Jackson, M., and Rosenfeld, A.B., On the Combined Effect of Silicon Oxide Thickness and Boron Implantation Under the Gate in MOS-FET Dosimeters; *TNS March 2020 534-540*
- Bickley, A.A.**, see Quartemont, N.J., *TNS March 2020 482-491*
- Bielejec, E.S.**, see Jasica, M.J., *TNS Jan. 2020 221-227*
- Bilba, T.**, see Goiffon, V., *TNS Jan. 2020 234-244*
- Bilko, K.**, Castro, C.B., Brugger, M., Alia, R.G., Kadi, Y., Lechner, A., Lerner, G., and Stein, O., Radiation Environment in the LHC Arc Sections During Run 2 and Future HL-LHC Operations; *TNS July 2020 1682-1690*
- Bilko, K.**, see Cecchetto, M., *TNS July 2020 1412-1420*
- Bilton, K.J.**, see Bandstra, M.S., *TNS May 2020 777-790*
- Binder, T.**, see Otaka, Y., *TNS June 2020 988-993*
- Binkley, E.**, see Pritchard, K., *TNS Jan. 2020 414-421*
- Bizarri, G.**, see Yoshikawa, A., *TNS June 2020 875*
- Black, D.A.**, see Auden, E.C., *TNS Jan. 2020 29-37*
- Black, D.A.**, see Black, J.D., *TNS June 2020 1125-1132*
- Black, J.D.**, see Auden, E.C., *TNS Jan. 2020 29-37*
- Black, J.D.**, Black, D.A., Domme, N.A., Dodd, P.E., Griffin, P.J., Nowlin, R.N., Trippe, J.M., Salas, J.G., Reed, R.A., Weller, R.A., Tonigan, A.M., and Schrimpf, R.D., DFF Layout Variations in CMOS SOI—Analysis of Hardening by Design Options; *TNS June 2020 1125-1132*
- Blackmore, E.**, see Belanger-Champagne, C., *TNS Jan. 2020 161-168*
- Blanc, W.**, see Benabdesselam, M., *TNS July 2020 1663-1668*
- Blazek, K.**, see Jary, V., *TNS June 2020 974-977*
- Blouke, M.**, see Hendrickson, B., *TNS July 2020 1732-1737*
- Blyth, D.**, see Scheuer, K., *TNS Aug. 2020 1846-1851*
- Boatella, C.**, see Alia, R.G., *TNS Jan. 2020 345-352*
- Boatella Polo, C.**, see Bagatin, M., *TNS July 2020 1421-1427*
- Bobrovsky, D.V.**, see Shvetsov-Shilovskiy, I.I., *TNS July 2020 1540-1546*
- Boch, J.**, see Rajkowski, T., *TNS July 2020 1494-1502*
- Boch, J.**, see Niskanen, K., *TNS July 2020 1365-1373*
- Bodegom, E.**, see Hendrickson, B., *TNS July 2020 1732-1737*
- Boente Garcia, O.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Boerekamp, J.**, see Wieczorek, H., *TNS Aug. 2020 1934-1945*
- Bogdanova, G.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Boiano, A.**, see Mastroianni, S., *TNS May 2020 832-839*
- Bolotnikov, A.**, see Sklyarchuk, V., *TNS Nov. 2020 2439-2444*
- Bolst, D.**, see Peracchi, S., *TNS Jan. 2020 169-174*
- Bolst, D.**, see James, B., *TNS Jan. 2020 146-153*
- Bolst, D.**, see Kok, A., *TNS Dec. 2020 2490-2500*
- Bombelli, L.**, see Tartoni, N., *TNS Aug. 2020 1952-1961*
- Bonaldo, S.**, see Zhao, S.E., *TNS Jan. 2020 253-259*
- Bonaldo, S.**, Zhao, S.E., O'Hara, A., Gorchichko, M., Zhang, E.X., Gerardin, S., Paccagnella, A., Waldron, N., Collaert, N., Putcha, V., Linten, D., Pantelides, S.T., Reed, R.A., Schrimpf, R.D., and Fleetwood, D.M., Total-Ionizing-Dose Effects and Low-Frequency Noise in 16-nm InGaAs FinFETs With $\text{HfO}_2/\text{Al}_2\text{O}_3$ Dielectrics; *TNS Jan. 2020 210-220*
- Bonaldo, S.**, Mattiazio, S., Enz, C., Baschiroto, A., Fleetwood, D.M., Paccagnella, A., and Gerardin, S., Ionizing-Radiation Response and Low-Frequency Noise of 28-nm MOSFETs at Ultrahigh Doses; *TNS July 2020 1302-1311*
- Bonaldo, S.**, Zhang, E.X., Zhao, S.E., Putcha, V., Parvais, B., Linten, D., Gerardin, S., Paccagnella, A., Reed, R.A., Schrimpf, R.D., and Fleetwood, D.M., Total-Ionizing-Dose Effects in InGaAs MOSFETs With High- k Gate Dielectrics and InP Substrates; *TNS July 2020 1312-1319*
- Bonsall, J.P.**, see Nergui, D., *TNS Jan. 2020 91-98*
- Borghi, S.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Bota, S.A.**, see Torrens, G., *TNS May 2020 811-817*
- Bottau, V.**, Tondut, L., Allinei, P., Perot, B., Eleon, C., Carasco, C., De Stefano, R., and Faussier, G., High-Resolution Gamma Spectrometry of a Plutonium Bearing Waste Drum With High-Energy Reaction-Induced Gamma Rays; *TNS April 2020 575-584*
- Bouazaoui, M.**, see Benabdesselam, M., *TNS July 2020 1663-1668*
- Bouazaoui, M.**, see Bahout, J., *TNS July 2020 1658-1662*
- Boukenter, A.**, see Morana, A., *TNS Jan. 2020 305-311*
- Boukenter, A.**, see Girard, S., *TNS Jan. 2020 289-295*
- Boukenter, A.**, see Morana, A., *TNS Jan. 2020 284-288*
- Boukenter, A.**, see Aubry, M., *TNS Jan. 2020 278-283*
- Boukenter, A.**, see Morana, A., *TNS July 2020 1637-1642*
- Boukenter, A.**, see Campanella, C., *TNS July 2020 1643-1649*
- Boukenter, A.**, see Bahout, J., *TNS July 2020 1658-1662*
- Boukenter, A.**, see De Michele, V., *TNS July 2020 1650-1657*
- Bounaud, M.**, see Eleon, C., *TNS Sept. 2020 2096-2104*
- Bourdarie, S.**, see Ruffenach, M., *TNS July 2020 1351-1359*
- Bourdarie, S.**, Calvel, P., Barillot, C., Rey, L., Parrinello, T., Hoyos, B., and Ecoffet, R., How Much Do Solar Cycle Variations Impact Long-Term Effect Predictions at LEO?; *TNS Oct. 2020 2196-2202*
- Bourdoux, P.**, see Ruffenach, M., *TNS July 2020 1351-1359*
- Bourret, E.**, see Derenzo, S.E., *TNS June 2020 888-893*
- Boussel, L.**, see Xie, B., *TNS June 2020 1066-1075*
- Boutillier, M.**, see Aubry, M., *TNS Jan. 2020 278-283*
- Bouwmans, G.**, see Benabdesselam, M., *TNS July 2020 1663-1668*
- Bouwmans, G.**, see Bahout, J., *TNS July 2020 1658-1662*
- Bowcock, T.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Boychenko, D.V.**, see Sotskov, D.I., *TNS Nov. 2020 2396-2404*

- Branlard, J.**, see Bellandi, A., *TNS May 2020 762-767*
- Branlard, J.**, see Cichalewski, W., *TNS Sept. 2020 2119-2127*
- Brecher, C.**, see Marshall, M.S.J., *TNS June 2020 969-973*
- Brecher, C.**, see Bhattacharya, P., *TNS June 2020 1032-1034*
- Breur, P.A.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Brewe, D.L.**, see Nergui, D., *TNS Jan. 2020 91-98*
- Brewer, R.M.**, Moran, S.L., Cox, J., Sierawski, B.D., McCurdy, M.W., Zhang, E.X., Iyer, S.S., Schrimpf, R.D., Alles, M.L., and Reed, R.A., The Impact of Proton-Induced Single Events on Image Classification in a Neuromorphic Computing Architecture; *TNS Jan. 2020 108-115*
- Brewer, R.M.**, see Wang, P., *TNS Sept. 2020 2015-2020*
- Brinkmann, K.**, see Orsich, P., *TNS June 2020 952-955*
- Britskiy, V.A.**, see Kashaykin, P.F., *TNS Oct. 2020 2162-2171*
- Britton, C.**, see Dalla Betta, G., *TNS April 2020 543*
- Brodsky, J.P.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Brogi, P.**, see Ratti, L., *TNS July 2020 1293-1301*
- Brown, C.**, see Bhattacharya, P., *TNS June 2020 1032-1034*
- Brown, D.**, see Fleetwood, D., *TNS Jan. 2020 7*
- Brown, D.**, see Fleetwood, D., *TNS July 2020 1201*
- Brown, E.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Brown, J.A.**, see Manfredi, J.J., *TNS Feb. 2020 434-442*
- Brown, S.T.**, Goodman, D., Chu, J., Williams, B., Williamson, M.R., and He, Z., Time-Encoded Gamma-Ray Imaging Using a 3-D Position-Sensitive CdZnTe Detector Array; *TNS Feb. 2020 464-472*
- Brubaker, E.**, see Manfredi, J.J., *TNS Feb. 2020 434-442*
- Brucoli, M.**, see Cecchetto, M., *TNS July 2020 1412-1420*
- Brugger, M.**, see Alia, R.G., *TNS Jan. 2020 345-352*
- Brugger, M.**, see Di Francesca, D., *TNS Jan. 2020 140-145*
- Brugger, M.**, see Bilko, K., *TNS July 2020 1682-1690*
- Brugger, M.**, see Ferraro, R., *TNS July 2020 1395-1403*
- Brum, R.M.**, see Goncalves, M.M., *TNS July 2020 1573-1580*
- Brun, J.**, see Volte, A., *TNS Nov. 2020 2405-2414*
- Brunhaver, J.**, see Libano, F., *TNS July 2020 1478-1484*
- Brunner, T.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Buchner, S.**, see Hales, J.M., *TNS Jan. 2020 81-90*
- Buchner, S.P.**, see Tzintzarov, G.N., *TNS Jan. 2020 260-267*
- Buchner, S.P.**, see Ryder, K.L., *TNS Jan. 2020 57-62*
- Buchner, S.P.**, see Idefonso, A., *TNS Jan. 2020 71-80*
- Buchner, S.P.**, see Idefonso, A., *TNS July 2020 1521-1529*
- Budagov, J.**, see Atanov, N., *TNS June 2020 978-982*
- Buet, X.**, see Magne, S., *TNS April 2020 617-624*
- Buliga, V.**, see Hawrami, R., *TNS June 2020 1020-1026*
- Burger, A.**, see Hawrami, R., *TNS June 2020 1020-1026*
- Burton, C.**, see Xu, R., *TNS April 2020 698-707*
- Butkowski, L.**, see Bellandi, A., *TNS May 2020 762-767*
- Buytaert, J.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Campanella, C.**, Morana, A., Girard, S., Guttilla, A., Mady, F., Benabdeslam, M., Desjonqueres, H., Monsanglant-Louvet, C., Balland, C., Marin, E., Ouerdane, Y., Boukenter, A., and Delepine-Lesoille, S., Combined Temperature and Radiation Effects on Radiation-Sensitive Single-Mode Optical Fibers; *TNS July 2020 1643-1649*
- Campanella, C.**, see De Michele, V., *TNS July 2020 1650-1657*
- Campbell, J.**, see Tzintzarov, G.N., *TNS Jan. 2020 260-267*
- Campbell, M.**, see Kremastiotis, I., *TNS Oct. 2020 2263-2272*
- Campion, R.**, see Williams, J.O.D., *TNS Sept. 2020 1987-1992*
- Cannas, M.**, see Girard, S., *TNS Jan. 2020 289-295*
- Cannas, M.**, see De Michele, V., *TNS July 2020 1650-1657*
- Cannon, M.J.**, Keller, A.M., Thurlow, C.A., Perez-Celis, A., and Wirthlin, M.J., Improving the Reliability of TMR With Nontriplicated I/O on SRAM FPGAs; *TNS Jan. 2020 312-320*
- Cantatore, G.**, see Mastroianni, S., *TNS May 2020 832-839*
- Cao, G.F.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Cao, J.**, Xu, L., Bhuvra, B.L., Fung, R., Wen, S., Cazzaniga, C., and Frost, C., SE Response of Guard-Gate FF in 16- and 7-nm Bulk FinFET Technologies; *TNS July 2020 1436-1442*
- Cao, L.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Cao, L.R.**, see Pan, L., *TNS Feb. 2020 443-449*
- Cao, L.R.**, see Dalla Betta, G., *TNS April 2020 543*
- Cao, L.R.**, see Pan, L., *TNS Oct. 2020 2255-2262*
- Cao, P.**, see Liu, Z., *TNS Aug. 2020 1904-1911*
- Cao, W.**, see Shu, L., *TNS July 2020 1390-1394*
- Cao, W.**, see Shu, L., *TNS June 2020 1133-1138*
- Cao, Y.**, see Gorchichko, M., *TNS Jan. 2020 245-252*
- Cao, Z.**, see Fan, Y., *TNS Oct. 2020 2246-2254*
- Capoen, B.**, see Benabdeslam, M., *TNS July 2020 1663-1668*
- Capoen, B.**, see Bahout, J., *TNS July 2020 1658-1662*
- Capra, S.**, Impedance and Noise Closed-Form Model of Large-Area Integrated Resistors With High Stray Capacitance to be Used as Feedback Discharge Devices in Charge-Sensitive Preamplifiers for Nuclear Spectroscopy; *TNS April 2020 722-731*
- Capra, S.**, and Pullia, A., Design and Experimental Validation of an Integrated Multichannel Charge Amplifier for Solid-State Detectors With Innovative Spectroscopic Range Booster; *TNS Aug. 2020 1877-1884*
- Carasco, C.**, see Bottau, V., *TNS April 2020 575-584*
- Carasco, C.**, see Marchais, T., *TNS April 2020 654-661*
- Carbonetto, S.**, Echarri, M., Lipovetzky, J., Garcia-Inza, M., and Faigon, A., Temperature-Compensated MOS Dosimeter Fully Integrated in a High-Voltage 0.35 μm CMOS Process; *TNS June 2020 1118-1124*
- Carette, M.**, see Volte, A., *TNS Nov. 2020 2405-2414*
- Carminati, M.**, see Hafizh, I., *TNS July 2020 1746-1759*
- Caron, P.**, Inguibert, C., Artola, L., Bezerra, F., and Ecoffet, R., New SEU Modeling Method for Calibrating Target System to Multiple Radiation Particles; *TNS Jan. 2020 44-49*
- Carrel, F.**, see Lynde, C., *TNS April 2020 679-687*
- Carron, J.**, see Ruffenach, M., *TNS July 2020 1351-1359*
- Casellas, L.M.**, see Le Roch, A., *TNS July 2020 1241-1250*
- Cassez, A.**, see Bahout, J., *TNS July 2020 1658-1662*
- Castro, C.B.**, see Bilko, K., *TNS July 2020 1682-1690*
- Catanzani, E.**, see Wei, Y., *TNS June 2020 939-945*
- Cates, J.W.**, see Vavrek, J.R., *TNS Nov. 2020 2421-2430*
- Cauz, D.**, see Mastroianni, S., *TNS May 2020 832-839*
- Cazzaniga, C.**, see Kastriotou, M., *TNS Jan. 2020 63-70*
- Cazzaniga, C.**, see Bagatin, M., *TNS Jan. 2020 154-160*
- Cazzaniga, C.**, see Alia, R.G., *TNS Jan. 2020 345-352*
- Cazzaniga, C.**, Alia, R.G., Kastriotou, M., Cecchetto, M., Fernandez-Martinez, P., and Frost, C.D., Study of the Deposited Energy Spectra in Silicon by High-Energy Neutron and Mixed Fields; *TNS Jan. 2020 175-180*
- Cazzaniga, C.**, see Cao, J., *TNS July 2020 1436-1442*
- Cazzaniga, C.**, see Wyrwoll, V., *TNS July 2020 1530-1539*
- Cazzaniga, C.**, see Cecchetto, M., *TNS July 2020 1412-1420*
- Cazzaniga, C.**, see Oliveira, D., *TNS June 2020 1161-1168*
- Cebollada, A.**, see Morana, A., *TNS Jan. 2020 305-311*
- Cecchetto, M.**, see Kastriotou, M., *TNS Jan. 2020 63-70*

C

- Caden, E.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Cadier, B.**, see Aubry, M., *TNS Jan. 2020 278-283*
- Cai, C.**, Liu, T., Zhao, P., Fan, X., Huang, H., Li, D., Ke, L., He, Z., Xu, L., Chen, G., and Liu, J., Multiple Layout-Hardening Comparison of SEU-Mitigated Filp-Flops in 22-nm UTBB FD-SOI Technology; *TNS Jan. 2020 374-381*
- Cai, Y.**, Wen, L., Li, Y., Guo, Q., Zhou, D., Feng, J., Zhang, X., Liu, B., and Fu, J., Single-Event Effects in Pinned Photodiode CMOS Image Sensors: SET and SEL; *TNS Aug. 2020 1861-1868*
- Caiulo, D.**, see Atanov, N., *TNS June 2020 978-982*
- Calabretta, L.**, see Chen, G., *TNS Jan. 2020 369-373*
- Calderoni, P.**, see Davis, K.L., *TNS April 2020 585-591*
- Calen, H.**, see Preston, M., *TNS June 2020 1093-1106*
- Calvel, P.**, see Bourdarie, S., *TNS Oct. 2020 2196-2202*
- Calvet, D.**, Clock-Centric Serial Links for the Synchronization of Distributed Readout Systems; *TNS Aug. 2020 1912-1919*
- Campanella, C.**, see Girard, S., *TNS Jan. 2020 289-295*
- Campanella, C.**, see Aubry, M., *TNS Jan. 2020 278-283*

- Cecchetto, M.**, see Alia, R.G., *TNS Jan. 2020 345-352*
- Cecchetto, M.**, see Cazzaniga, C., *TNS Jan. 2020 175-180*
- Cecchetto, M.**, see Coronetti, A., *TNS July 2020 1606-1613*
- Cecchetto, M.**, see Wyrwoll, V., *TNS July 2020 1590-1598*
- Cecchetto, M.**, Garcia Alia, R., Wrobel, F., Tali, M., Stein, O., Lerner, G., Bilko, K., Esposito, L., Bahamonde Castro, C., Kadi, Y., Danzeca, S., Bruccoli, M., Cazzaniga, C., Bagatin, M., Gerardin, S., and Paccagnella, A., Thermal Neutron-Induced SEUs in the LHC Accelerator Environment; *TNS July 2020 1412-1420*
- Ceraudo, F.**, see Daniel, G., *TNS April 2020 644-653*
- Cerba, S.**, Luley, J., Vrban, B., Osusky, F., and Necas, V., Unmanned Radiation-Monitoring System; *TNS April 2020 636-643*
- Cerutti, F.**, see Alia, R.G., *TNS Jan. 2020 345-352*
- Cerutti, F.**, see Wyrwoll, V., *TNS July 2020 1590-1598*
- Cerutti, F.**, see Wyrwoll, V., *TNS July 2020 1530-1539*
- Cervelli, F.**, see Atanov, N., *TNS June 2020 978-982*
- Chae, K.S.**, see Woo, J., *TNS April 2020 740-745*
- Chakraborty, P.S.**, see Johnson, R.A., *TNS Jan. 2020 135-139*
- Chambers, C.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Champavere, A.**, see Morana, A., *TNS Jan. 2020 305-311*
- Chana, B.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Charlebois, S.A.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Chatterji, S.**, see Tartoni, N., *TNS Aug. 2020 1952-1961*
- Chaudhuri, S.K.**, see Sajjad, M., *TNS Aug. 2020 1946-1951*
- Chaumeix, N.**, see Magne, S., *TNS April 2020 617-624*
- Chen, G.**, see Cai, C., *TNS Jan. 2020 374-381*
- Chen, G.**, Xu, M., Song, Y., Chen, Y., Ding, K., Li, J., Karamyshev, O., Karamysheva, G., Shirkov, G., and Calabretta, L., Design and Research of Magnetic Field Mapping System for SC200; *TNS Jan. 2020 369-373*
- Chen, G.**, see Ren, Z., *TNS July 2020 1320-1325*
- Chen, H.**, see Yu, X., *TNS April 2020 716-721*
- Chen, H.**, see Yao, L., *TNS Sept. 2020 2155-2160*
- Chen, J.**, Wang, J., Chen, Z., and Ren, Z., Calculation of Characteristic Time of Space Charge Limited Effect of SGEMP; *TNS May 2020 818-822*
- Chen, J.**, see Hu, C., *TNS June 2020 1014-1019*
- Chen, J.**, Zeng, C., Deng, J., and Li, Z., A Modified Steady-State Method for Space Charge-Limited Effect of SGEMP; *TNS Nov. 2020 2353-2362*
- Chen, K.**, see Yao, L., *TNS Sept. 2020 2155-2160*
- Chen, L.**, see He, N., *TNS Jan. 2020 400-404*
- Chen, L.**, see Zhang, Z., *TNS Sept. 2020 2042-2050*
- Chen, W.**, see Vernon, E., *TNS April 2020 752-759*
- Chen, W.**, see Wang, X., *TNS July 2020 1443-1451*
- Chen, W.**, see Shu, L., *TNS July 2020 1390-1394*
- Chen, W.**, see Shu, L., *TNS June 2020 1133-1138*
- Chen, W.**, see Shu, L., *TNS Nov. 2020 2392-2395*
- Chen, X.**, see Zhu, G., *TNS July 2020 1702-1709*
- Chen, X.**, see Li, L., *TNS March 2020 508-517*
- Chen, X.**, Zhang, Z., Zhang, K., Guan, X., Weng, X., and Han, H., Study on the Time Response of a Barium Fluoride Scintillation Detector for Fast Pulse Radiation Detection; *TNS Aug. 2020 1893-1898*
- Chen, X.**, see Li, L., *TNS Aug. 2020 1826-1834*
- Chen, X.**, see Li, L., *TNS Sept. 2020 2062-2072*
- Chen, Y.**, see Chen, G., *TNS Jan. 2020 369-373*
- Chen, Y.**, see Lu, B., *TNS June 2020 1175-1184*
- Chen, Z.**, see Wu, M., *TNS April 2020 708-715*
- Chen, Z.**, see Chen, J., *TNS May 2020 818-822*
- Cheng, Z.**, see Li, Y., *TNS Nov. 2020 2454-2462*
- Cheon, B.G.**, see Lee, I.S., *TNS Sept. 2020 2143-2147*
- Cherepy, N.**, see O'Neal, S., *TNS April 2020 746-751*
- Cherepy, N.J.**, see Decker, A.W., *TNS Nov. 2020 2329-2336*
- Chernenko, K.**, see Wiczorek, H., *TNS Aug. 2020 1934-1945*
- Chewpraditkul, W.**, Pattanaboonmee, N., Sakthong, O., Yamaji, A., Kamada, K., Kurosawa, S., Yoshikawa, A., Drozdowski, W., Witkowski, M.E., Szczesniak, T., Grodzicka, M., and Moszynski, M., Scintillation Characteristics of Mg²⁺-Codoped Y_{0.8}Gd_{2.2}(Al_{s-x}Ga_x)O₁₂:Ce Single Crystals; *TNS June 2020 910-914*
- Chewpraditkul, W.**, see Chewpraditkul, W., *TNS June 2020 910-914*
- Chewpraditkul, W.**, Pattanaboonmee, N., Sakthong, O., Yoshino, M., Horiai, T., Yoshikawa, A., Gushchina, L., Kamada, K., Kurosawa, S., Drozdowski, W., Witkowski, M.E., Szczesniak, T., Moszynski, M., and Nikl, M., Luminescence and Scintillation Properties of Mg²⁺-Codoped Lu_{0.6}Gd_{2.4}Al₂Ga₃O₁₂:Ce Single Crystal; *TNS June 2020 904-909*
- Chewpraditkul, W.**, see Chewpraditkul, W., *TNS June 2020 904-909*
- Chewpraditkul, W.**, see Sakthong, O., *TNS Oct. 2020 2295-2299*
- Chewpraditkul, W.**, see Sakthong, O., *TNS Oct. 2020 2295-2299*
- Cheymol, B.**, see Possamai Bastos, R., *TNS July 2020 1404-1411*
- Cheymol, B.**, see Fabero, J.C., *TNS July 2020 1461-1469*
- Cheymol, G.**, Maurin, L., Remy, L., Arounassalame, V., Maskrot, H., Rougeault, S., Dauvois, V., Le Tutour, P., Huot, N., Ouerdane, Y., and Ferdinand, P., Irradiation Tests of Optical Fibers and Cables Devoted to Corium Monitoring in Case of a Severe Accident in a Nuclear Power Plant; *TNS April 2020 669-678*
- Cheymol, G.**, Verneuil, A., Grange, P., Maskrot, H., and Destouches, C., High-Temperature Measurements With a Fabry-Perot Extensometer; *TNS April 2020 552-558*
- Cheymol, G.**, Maurin, L., Remy, L., Arounassalame, V., Maskrot, H., Rougeault, S., Dauvois, V., Le Tutour, P., Huot, N., Ouerdane, Y., and Ferdinand, P., Corrections to "Irradiation Tests of Optical Fibers and Cables Devoted to Corium Monitoring in Case of a Severe Accident in a Nuclear Power Plant"; *TNS June 2020 1195*
- Chiang, C.**, see Lavelle, C.M., *TNS Jan. 2020 389-399*
- Chien, D.K.**, see Hung, D.T., *TNS Oct. 2020 2224-2230*
- Chiu, M.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Cho, H.**, see Jung, S., *TNS Nov. 2020 2311-2320*
- Cho, H.E.**, see Lee, I.S., *TNS Sept. 2020 2143-2147*
- Choi, S.**, see Lee, I.S., *TNS Sept. 2020 2143-2147*
- Chowdhury, S.**, see Manfredi, J.J., *TNS Feb. 2020 434-442*
- Chu, J.**, see Brown, S.T., *TNS Feb. 2020 464-472*
- Chumakov, A.I.**, see Shvetsov-Shilovskiy, I.I., *TNS July 2020 1540-1546*
- Chung, H.**, see Kim, Y., *TNS April 2020 592-598*
- Cichalewski, W.**, see Bellandi, A., *TNS May 2020 762-767*
- Cichalewski, W.**, Sekutowicz, J., Napieralski, A., Rybaniec, R., Branlard, J., and Ayvazyan, V., Continuous Wave Operation of Superconducting Accelerating Cavities With High Loaded Quality Factor; *TNS Sept. 2020 2119-2127*
- Clemente, J.A.**, see Franco, F.J., *TNS July 2020 1547-1554*
- Clemente, J.A.**, see Fabero, J.C., *TNS July 2020 1461-1469*
- Clemente, J.A.**, see Rezaei, M., *TNS Oct. 2020 2188-2195*
- Clemente, J.A.**, see Korkian, G., *TNS Nov. 2020 2345-2352*
- Cleveland, B.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Coco, V.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Coi, O.**, Di Pendina, G., Prenat, G., and Torres, L., Spin-Transfer Torque Magnetic Tunnel Junction for Single-Event Effects Mitigation in IC Design; *TNS July 2020 1674-1681*
- Colao, F.**, see Atanov, N., *TNS June 2020 978-982*
- Collaert, N.**, see Zhao, S.E., *TNS Jan. 2020 253-259*
- Collaert, N.**, see Bonaldo, S., *TNS Jan. 2020 210-220*
- Collazuol, G.**, see Ratti, L., *TNS July 2020 1293-1301*
- Collins, P.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Collot, J.**, see Marchais, T., *TNS April 2020 654-661*
- Cononetti, A.**, see Alia, R.G., *TNS Jan. 2020 345-352*
- Coon, M.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Cooper, R.J.**, see Vavrek, J.R., *TNS Nov. 2020 2421-2430*
- Corbiere, F.**, see Rizzolo, S., *TNS July 2020 1256-1262*
- Corbiere, F.**, see Dewitte, H., *TNS July 2020 1284-1292*
- Corde, S.**, see Biasi, G., *TNS March 2020 534-540*
- Cordelli, M.**, see Atanov, N., *TNS June 2020 978-982*
- Coronetti, A.**, see Kastriotou, M., *TNS Jan. 2020 63-70*
- Coronetti, A.**, Alia, R.G., Cecchetto, M., Hajdas, W., Soderstrom, D., Javanainen, A., and Saigne, F., The Pion Single-Event Effect Resonance and its Impact in an Accelerator Environment; *TNS July 2020 1606-1613*
- Coronetti, A.**, see Wyrwoll, V., *TNS July 2020 1530-1539*
- Corradi, G.**, see Mastroianni, S., *TNS May 2020 832-839*
- Corradi, M.**, see Atanov, N., *TNS June 2020 978-982*
- Costantino, A.**, see Bagatin, M., *TNS Jan. 2020 154-160*

Costantino, A., see Bagatin, M., *TNS July 2020 1421-1427*
Costes-Ori, V., see Aubry, M., *TNS July 2020 1251-1255*
Coupland, D.D., see Watts, M.M., *TNS March 2020 525-533*
Cox, J., see Brewer, R.M., *TNS Jan. 2020 108-115*
Craycraft, A., see Lv, P., *TNS Dec. 2020 2501-2510*
Cressler, J.D., see Tzintzarov, G.N., *TNS Jan. 2020 260-267*
Cressler, J.D., see Goley, P.S., *TNS Jan. 2020 296-304*
Cressler, J.D., see Nergui, D., *TNS Jan. 2020 91-98*
Cressler, J.D., see Ildefonso, A., *TNS Jan. 2020 71-80*
Cressler, J.D., see Hales, J.M., *TNS Jan. 2020 81-90*
Cressler, J.D., see Ildefonso, A., *TNS July 2020 1521-1529*
Crha, J., see Miller, S.R., *TNS Aug. 2020 1929-1933*
Crook, R., see Tartoni, N., *TNS Aug. 2020 1952-1961*
Cuba, V., see Popovich, K., *TNS June 2020 962-968*
Cuba, V., see Tomanova, K., *TNS June 2020 933-938*
Cuenca-Asensi, S., see Serrano-Cases, A., *TNS July 2020 1511-1520*
Cui, J., see Wang, H., *TNS May 2020 805-810*
Czuba, K., see Sikora, D., *TNS Sept. 2020 2136-2142*

D

d'Almeida, T., see Ribiere, M., *TNS July 2020 1722-1731*
Dabagov, S., see Mastroianni, S., *TNS May 2020 832-839*
Dai, H., see Wei, Y., *TNS June 2020 939-945*
Dai, H.T., Zhang, Y.L., Zang, J.J., Zhang, Z.Y., Wei, Y.F., Wu, L.B., Liu, C.M., Luo, C.N., Kyrtzidis, D., De Benedittis, A., Zhao, C., Wang, Y., Jiang, P.C., Wang, Y.Z., Zhao, Y.Z., Wang, X.L., Xu, Z.Z., and Huang, G.S., Response of the BGO Calorimeter to Cosmic-Ray Nuclei in the DAMPE Experiment on Orbit; *TNS June 2020 956-961*
Dai, T., see Wei, Q., *TNS Feb. 2020 450-454*
Dall'Occo, E., see Fernandez Prieto, A., *TNS April 2020 732-739*
Dalla Betta, G., Obryk, B., Pia, M.G., Britton, C., Cao, L.R., Dong, Z., Dreyer, J., Girard, S., Jansson, P., Joyce, M., Kouzes, R., and Lyoussi, A., Comments by the Senior Editor; *TNS April 2020 543*
Dalmasson, J., see Lv, P., *TNS Dec. 2020 2501-2510*
Daniel, D.J., see Pandey, I.R., *TNS June 2020 915-921*
Daniel, D.J., Khan, A., Tyagi, M., and Kim, H.J., Scintillation Properties of Tetrafluoroaluminate Crystal; *TNS June 2020 898-903*
Daniel, G., Ceraudo, F., Limousin, O., Maier, D., and Meuris, A., Automatic and Real-Time Identification of Radionuclides in Gamma-Ray Spectra: A New Method Based on Convolutional Neural Network Trained With Synthetic Data Set; *TNS April 2020 644-653*
Daniels, T., see Lv, P., *TNS Dec. 2020 2501-2510*
Dannheim, D., see Kremastiotis, I., *TNS Oct. 2020 2263-2272*
Danzeca, S., see Kastriotou, M., *TNS Jan. 2020 63-70*
Danzeca, S., see Alia, R.G., *TNS Jan. 2020 345-352*
Danzeca, S., see Gnemmi, G., *TNS July 2020 1614-1622*
Danzeca, S., see Ferraro, R., *TNS July 2020 1395-1403*
Danzeca, S., see Cecchetto, M., *TNS July 2020 1412-1420*
Darroch, L., see Lv, P., *TNS Dec. 2020 2501-2510*
Dauvois, V., see Cheymol, G., *TNS April 2020 669-678*
Dauvois, V., see Cheymol, G., *TNS June 2020 1195*
David, D., see Haran, A., *TNS Aug. 2020 1803-1812*
Davis, J.A., see Peracchi, S., *TNS Jan. 2020 169-174*
Davis, J.A., see James, B., *TNS Jan. 2020 146-153*
Davis, K.L., Gusarov, A., Unruh, T.C., Calderoni, P., Heidrich, B.J., Verner, K.M., Rashdan, A.A., Van Dyck, S., and Uytendhouwen, I., Evaluation of Low Dose Silicon Carbide Temperature Monitors; *TNS April 2020 585-591*
Davis, P.W., see Privat, A., *TNS July 2020 1332-1338*
Davydov, Y., see Atanov, N., *TNS July 2020 1760-1764*
Davydov, Y.I., see Atanov, N., *TNS June 2020 978-982*
Dazeley, S., see Asghari, A., *TNS Nov. 2020 2431-2438*
De Benedittis, A., see Dai, H.T., *TNS June 2020 956-961*
de Bibikoff, A., and Lamberbourg, P., Method for System-Level Testing of COTS Electronic Board Under High-Energy Heavy Ions; *TNS Oct. 2020 2179-2187*
de Boissac, C.L., see Abouzeid, F., *TNS July 2020 1326-1331*
de Bruyn, K., see Fernandez Prieto, A., *TNS April 2020 732-739*
de Capua, S., see Fernandez Prieto, A., *TNS April 2020 732-739*
de Dortan, F.D.G., see Ribiere, M., *TNS July 2020 1722-1731*
De Geronimo, G., see Vernon, E., *TNS April 2020 752-759*
de Izarra, G., see Obratzsova, O., *TNS May 2020 863-871*
De Michele, V., see Girard, S., *TNS Jan. 2020 289-295*
De Michele, V., Morana, A., Campanella, C., Vidalot, J., Alessi, A., Boukenter, A., Cannas, M., Paillet, P., Ouerdane, Y., and Girard, S., Steady-State X-Ray Radiation-Induced Attenuation in Canonical Optical Fibers; *TNS July 2020 1650-1657*
de Oliveira, A.B., Tambara, L.A., Benevenuti, F., Benites, L.A.C., Added, N., Aguiar, V.A.P., Medina, N.H., Silveira, M.A.G., and Kastensmidt, F.L., Evaluating Soft Core RISC-V Processor in SRAM-Based FPGA Under Radiation Effects; *TNS July 2020 1503-1510*
De Stefano, R., see Bottau, V., *TNS April 2020 575-584*
Decker, A.W., Cherepy, N.J., Hok, S., and Hayward, J.P., Simulated X-Ray Radiographic Performance of a Bismuth-Loaded PVT Array; *TNS Nov. 2020 2329-2336*
Degenhardt, C., see Kumar, S., *TNS June 2020 1169-1174*
Dehmelt, K., see Azmoun, B., *TNS Aug. 2020 1869-1876*
Deladerriere, T., see Goiffon, V., *TNS Jan. 2020 234-244*
Delanay, R., see Ribiere, M., *TNS July 2020 1722-1731*
Delepine-Lesoille, S., see Campanella, C., *TNS July 2020 1643-1649*
Denes, P., see Grace, C.R., *TNS May 2020 823-831*
Deng, J., see Chen, J., *TNS Nov. 2020 2353-2362*
Deng, Z., see Liu, F., *TNS Oct. 2020 2209-2216*
Deptuch, G., Hoff, J., Jindariani, S., Joshi, S., Li, D., Liu, T., Ogrenici-Memik, S., Olsen, J., and Tran, N., Performance Study of the First 2-D Prototype of Vertically Integrated Pattern Recognition Associative Memory; *TNS Sept. 2020 2111-2118*
Derenzo, S.E., and Bourret, E., Monte Carlo Calculations of the Detection Efficiency of Composite Scintillator Arrays for Fast and Moderated Neutrons, and for Gamma-Ray Spectroscopy; *TNS June 2020 888-893*
Derraji, K., Favotto, C., Valmalette, J., Villain, S., Fiorido, T., Gavari, J., Nolibé, G., Lyoussi, A., and Guinneton, F., Role of Chemical Substitution in the Photoluminescence Properties of Cerium Samarium Tungstates $Ce_{2-x}Sm_x(WO_4)_3$ ($0 \leq x \leq 0.3$); *TNS April 2020 568-574*
Desai, R.J., Patre, B.M., Munje, R.K., Tiwari, A.P., and Shimjith, S.R., Integral Sliding Mode for Power Distribution Control of Advanced Heavy Water Reactor; *TNS June 2020 1076-1085*
Desai, S.S., see Kalyani, ., *TNS Nov. 2020 2415-2420*
Deshpande, A., see Azmoun, B., *TNS Aug. 2020 1869-1876*
Desjonqueres, H., see Campanella, C., *TNS July 2020 1643-1649*
Desjonqueres, H., see Dewitte, H., *TNS July 2020 1284-1292*
Deslandes, K., see Lv, P., *TNS Dec. 2020 2501-2510*
Destouches, C., see Cheymol, G., *TNS April 2020 552-558*
Destouches, C., see Gruel, A., *TNS April 2020 559-567*
Dettori, F., see Fernandez Prieto, A., *TNS April 2020 732-739*
DeVoe, R., see Lv, P., *TNS Dec. 2020 2501-2510*
Dewitte, H., see Le Roch, A., *TNS July 2020 1241-1250*
Dewitte, H., Rizzolo, S., Paillet, P., Magnan, P., Le Roch, A., Corbiere, F., Molina, R., Girard, S., Allanche, T., Muller, C., Desjonqueres, H., Mace, J.-., Baudu, J.-., Flores, A.S., and Goiffon, V., Annealing Effects on Radiation-Hardened CMOS Image Sensors Exposed to Ultrahigh Total Ionizing Doses; *TNS July 2020 1284-1292*
Dhote, J., see Magne, S., *TNS April 2020 617-624*
Dhulla, V.H., see Smith, J.A., *TNS May 2020 797-804*
Di Francesca, D., see Girard, S., *TNS Jan. 2020 289-295*
Di Francesca, D., Kandemir, K., Li Vecchi, G., Alia, R.G., Kadi, Y., and Bruger, M., Implementation of Optical-Fiber Postmortem Dose Measurements: A Proof of Concept; *TNS Jan. 2020 140-145*
Di Meo, P., see Mastroianni, S., *TNS May 2020 832-839*
Di Pendina, G., see Coi, O., *TNS July 2020 1674-1681*
Di Santo, M., see Wei, Y., *TNS June 2020 939-945*
Di Sciascio, G., see Mastroianni, S., *TNS May 2020 832-839*
Di Stefano, R., see Mastroianni, S., *TNS May 2020 832-839*
Dien, N.N., see Hung, D.T., *TNS Oct. 2020 2224-2230*

- Dikshit, B.**, and Sharma, A., Design and Analytical Evaluation of a New Ion Collection Geometry for Improvement in Quantity and Quality of Product During Laser Isotope Separation; *TNS Dec. 2020 2465-2473*
- Dilillo, L.**, see Ferraro, R., *TNS July 2020 1395-1403*
- Dilling, J.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Dimiccoli, V.**, see Laneve, D., *TNS May 2020 768-776*
- Ding, D.**, see Hu, C., *TNS June 2020 1014-1019*
- Ding, K.**, see Chen, G., *TNS Jan. 2020 369-373*
- Ding, L.**, see Fleetwood, D., *TNS Jan. 2020 7*
- Ding, L.**, see Wang, X., *TNS July 2020 1443-1451*
- Ding, L.**, see Fleetwood, D., *TNS July 2020 1201*
- Ding, Y.Y.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Diociaiuti, E.**, see Atanov, N., *TNS June 2020 978-982*
- Dion, A.**, see Goiffon, V., *TNS Jan. 2020 234-244*
- Dirassen, B.**, see Ben Zaid, A., *TNS Jan. 2020 191-200*
- Djahanshahi, H.**, see Zhang, Z., *TNS Sept. 2020 2042-2050*
- Dodd, P.E.**, see Black, J.D., *TNS June 2020 1125-1132*
- Dodds, N.A.**, see Goley, P.S., *TNS Jan. 2020 296-304*
- Dodds, N.A.**, see Wang, P., *TNS Sept. 2020 2015-2020*
- Dolinski, M.J.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Domme, N.A.**, see Black, J.D., *TNS June 2020 1125-1132*
- Donati, S.**, see Atanov, N., *TNS June 2020 978-982*
- Dong, L.**, Yang, J., Yu, X., Lv, G., Fan, Y., and Li, X., Evolution of Ionization-Induced Defects in GLPBP Bipolar Transistors at Different Temperatures; *TNS Sept. 2020 2003-2008*
- Dong, Y.**, see Dong, Z., *TNS Aug. 2020 1780-1790*
- Dong, Z.**, see Dalla Betta, G., *TNS April 2020 543*
- Dong, Z.**, Zhang, Z., Dong, Y., and Huang, X., Cascaded HTGR Power-Level Control Only by Regulating Primary Helium Flow Rate; *TNS Aug. 2020 1780-1790*
- Donghia, R.**, see Atanov, N., *TNS June 2020 978-982*
- Doria, L.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Dormenev, V.**, see Orsich, P., *TNS June 2020 952-955*
- Dort, K.**, see Kremastiotis, I., *TNS Oct. 2020 2263-2272*
- dos Santos, F.F.**, see Oliveira, D., *TNS June 2020 1161-1168*
- Doque, P.**, see Xie, B., *TNS June 2020 1066-1075*
- Dragone, A.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Dreimanis, K.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Dreyer, J.**, see Dalla Betta, G., *TNS April 2020 543*
- Driutti, A.**, see Mastroianni, S., *TNS May 2020 832-839*
- Drozdowski, W.**, see Chewpraditkul, W., *TNS June 2020 910-914*
- Drozdowski, W.**, see Chewpraditkul, W., *TNS June 2020 904-909*
- Drozdowski, W.**, see Sakthong, O., *TNS Oct. 2020 2295-2299*
- Du, B.**, see Sterpone, L., *TNS Sept. 2020 2034-2041*
- Du, Z.**, see Zhu, G., *TNS July 2020 1702-1709*
- Duan, J.**, see Wang, X., *TNS May 2020 791-796*
- Dubrawski, A.**, see Miller, K., *TNS June 2020 1185-1194*
- Dubrawski, A.**, see Miller, J.K., *TNS Oct. 2020 2278-2285*
- Dubus, P.**, see Rajkowski, T., *TNS July 2020 1494-1502*
- Ducret, S.**, see Nuns, T., *TNS July 2020 1263-1272*
- Duhamel, O.**, see Riffaud, J., *TNS Oct. 2020 2172-2178*
- Dursun, B.**, see Bellandi, A., *TNS May 2020 762-767*
- Dutertre, J.**, see Possamai Bastos, R., *TNS July 2020 1404-1411*
- Dutta, D.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Duvauchelle, P.**, see Xie, B., *TNS June 2020 1066-1075*
- Dyer, A.**, Hands, A., Ryden, K., Dyer, C., Flintoft, I., and Ruffenach, A., Single-Event Effects in Ground-Level Infrastructure During Extreme Ground-Level Enhancements; *TNS June 2020 1139-1143*
- Dyer, C.**, see Dyer, A., *TNS June 2020 1139-1143*
- E**
- Ebara, M.**, Yamada, K., Kojima, K., Tsukita, Y., Furuta, J., and Kobayashi, K., Evaluation of Soft-Error Tolerance by Neutrons and Heavy Ions on Flip Flops With Guard Gates in a 65-nm Thin BOX FDSOI Process; *TNS July 2020 1470-1477*
- Echarri, M.**, see Carbonetto, S., *TNS June 2020 1118-1124*
- Echenard, B.**, see Atanov, N., *TNS June 2020 978-982*
- Echevers, J.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Eck, D.**, see Tisseur, D., *TNS July 2020 1715-1721*
- Ecoffet, R.**, see Caron, P., *TNS Jan. 2020 44-49*
- Ecoffet, R.**, see Aubry, M., *TNS July 2020 1251-1255*
- Ecoffet, R.**, see Bourdarie, S., *TNS Oct. 2020 2196-2202*
- Edaltafar, F.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Egidios, N.**, see Kremastiotis, I., *TNS Oct. 2020 2263-2272*
- Eklund, L.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- El Bitar, Z.**, see Lynde, C., *TNS April 2020 679-687*
- El Hamzaoui, H.**, see Benabdesselam, M., *TNS July 2020 1663-1668*
- Elbeltagi, M.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Eleon, C.**, see Ben Mosbah, M., *TNS April 2020 662-668*
- Eleon, C.**, see Bottau, V., *TNS April 2020 575-584*
- Eleon, C.**, Battiston, F., Bounaud, M., Mosbah, M.B., Passard, C., and Perot, B., Boron-Coated Straws Imaging Panel Capability for Passive and Active Neutron Measurements of Radioactive Waste Drums; *TNS Sept. 2020 2096-2104*
- Elesin, V.V.**, see Sotskov, D.I., *TNS Nov. 2020 2396-2404*
- Elesina, V.V.**, see Sotskov, D.I., *TNS Nov. 2020 2396-2404*
- En, Y.**, see Yue, S., *TNS July 2020 1339-1344*
- Enqvist, A.**, see Henderson, K., *TNS May 2020 840-857*
- Entrena, L.**, see Pena-Fernandez, M., *TNS Jan. 2020 126-134*
- Entrena, L.**, see Pena-Fernandez, M., *TNS July 2020 1452-1460*
- Enz, C.**, see Bonaldo, S., *TNS July 2020 1302-1311*
- Erickson, A.**, see Gillis, W.C., *TNS Nov. 2020 2321-2328*
- Esposito, L.**, see Alia, R.G., *TNS Jan. 2020 345-352*
- Esposito, L.**, see Cecchetto, M., *TNS July 2020 1412-1420*
- Esqueda, I.S.**, see Fleetwood, D., *TNS Jan. 2020 7*
- Estre, N.**, see Tisseur, D., *TNS July 2020 1715-1721*
- Evans, H.**, see Hands, A.D.P., *TNS Jan. 2020 181-190*
- Evans, T.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Everson, L.R.**, see Pande, N., *TNS Jan. 2020 116-125*
- F**
- Fabero, J.C.**, see Franco, F.J., *TNS July 2020 1547-1554*
- Fabero, J.C.**, Mecha, H., Franco, F.J., Clemente, J.A., Korkian, G., Rey, S., Cheymol, B., Baylac, M., Hubert, G., and Velazco, R., Single Event Upsets Under 14-MeV Neutrons in a 28-nm SRAM-Based FPGA in Static Mode; *TNS July 2020 1461-1469*
- Fabero, J.C.**, see Rezaei, M., *TNS Oct. 2020 2188-2195*
- Fabero, J.C.**, see Korkian, G., *TNS Nov. 2020 2345-2352*
- Fabris, L.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Faigon, A.**, see Carbonetto, S., *TNS June 2020 1118-1124*
- Fairbank, D.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Fairbank, W.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Falco, S.D.**, see Atanov, N., *TNS June 2020 978-982*
- Falconi, M.C.**, see Laneve, D., *TNS May 2020 768-776*
- Falguere, D.**, see Ruffenach, M., *TNS July 2020 1351-1359*
- Fan, R.**, see Li, Y., *TNS Dec. 2020 2474-2480*
- Fan, W.**, see Azmoun, B., *TNS Aug. 2020 1869-1876*
- Fan, X.**, see Cai, C., *TNS Jan. 2020 374-381*
- Fan, Y.**, see Dong, L., *TNS Sept. 2020 2003-2008*
- Fan, Y.**, Zhao, L., Qin, J., Jiang, Z., Cao, Z., Liu, S., and An, Q., Research and Verification on Real-Time Interpolated Timing Algorithm Based on Waveform Digitization; *TNS Oct. 2020 2246-2254*
- Farine, J.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Fasoli, M.**, see Yoshikawa, A., *TNS June 2020 875*
- Faussier, G.**, see Bottau, V., *TNS April 2020 575-584*
- Favotto, C.**, see Derraji, K., *TNS April 2020 568-574*
- Fawaz, I.**, see Miller, K., *TNS June 2020 1185-1194*
- Faynot, O.**, see Riffaud, J., *TNS Oct. 2020 2172-2178*
- Fedorov, A.**, see Kurosawa, S., *TNS June 2020 994-998*
- Fedorov, V.A.**, Kashchuk, Y.A., Martazov, E.S., Parishkin, Y.A., Selyaev, N.A., and Vorobiev, V.A., Study of the Data Acquisition System for ITER Divertor Neutron Flux Monitor Diagnostic; *TNS April 2020 688-693*
- Feldbach, E.**, see Saaring, J., *TNS June 2020 1009-1013*

- Feng, B.**, see Zhang, J., *TNS July 2020 1691-1698*
- Feng, J.**, see Cai, Y., *TNS Aug. 2020 1861-1868*
- Feng, Y.**, see Pan, L., *TNS Feb. 2020 443-449*
- Feng, Y.**, see Pan, L., *TNS Oct. 2020 2255-2262*
- Ferdinand, P.**, see Cheymol, G., *TNS April 2020 669-678*
- Ferdinand, P.**, see Cheymol, G., *TNS June 2020 1195*
- Ferlet-Cavrois, V.**, see Kastriotou, M., *TNS Jan. 2020 63-70*
- Ferlet-Cavrois, V.**, see Bagatin, M., *TNS Jan. 2020 154-160*
- Ferlet-Cavrois, V.**, see Alia, R.G., *TNS Jan. 2020 345-352*
- Ferlet-Cavrois, V.**, see Bagatin, M., *TNS July 2020 1421-1427*
- Fernandez Martinez, P.**, see Bagatin, M., *TNS July 2020 1421-1427*
- Fernandez Prieto, A.**, Vazquez Regueiro, P., Hennessy, K., Buytaert, J., van Beuzekom, M., Lemos Cid, E., Eklund, L., de Bruyn, K., Naik, S., Schiller, M., Murray, D., Leflat, A., Boente Garcia, O., Gallas Torreira, A., Garcia Plana, B., Bowcock, T., Dettori, F., Dreimanis, K., Franco Lima, V., Hutchcroft, D., Rinnert, K., Shears, T., Augusto, O., Coco, V., Collins, P., Evans, T., Ferro-Luzzi, M., Funk, W., Schindler, H., Akiba, K., Dall'Occo, E., Sanchez Graz, C., Hulsbergen, W., Hynds, D., Kostiuik, I., Merk, M., Snoch, A., Seman Bobulska, D., Borghi, S., de Capua, S., Dutta, D., Gersabeck, M., Parkes, C., Svihra, P., Williams, M., Bogdanova, G., Volkov, V., Kopciwicz, P., Majewski, M., Oblakowska-Mucha, A., Rachwal, B., Szumlak, T., Meyer Garcia, L., Marinho, F., Helena Mendes, L., Nasteva, I., Otalora, J., Rodrigues, G., Velthuis, J., Jalocha, P., John, M., Jurik, N., Scantlebury-Smead, L., Back, J., Gershon, T., Latham, T., and Morris, A., Phase I Upgrade of the Readout System of the Vertex Detector at the LHCb Experiment; *TNS April 2020 732-739*
- Fernandez-Martinez, P.**, see Kastriotou, M., *TNS Jan. 2020 63-70*
- Fernandez-Martinez, P.**, see Alia, R.G., *TNS Jan. 2020 345-352*
- Fernandez-Martinez, P.**, see Cazzaniga, C., *TNS Jan. 2020 175-180*
- Fernandez-Martinez, P.**, see Wyrwoll, V., *TNS July 2020 1590-1598*
- Fernandez-Martinez, P.**, see Wyrwoll, V., *TNS July 2020 1530-1539*
- Ferrara, S.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Ferrari, C.**, see Mastroianni, S., *TNS May 2020 832-839*
- Ferraro, R.**, Foucard, G., Infantino, A., Dilillo, L., Brugger, M., Masi, A., Garcia Alia, R., and Danzeca, S., COTS Optocoupler Radiation Qualification Process for LHC Applications Based on Mixed-Field Irradiations; *TNS July 2020 1395-1403*
- Ferro-Luzzi, M.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Feyzbakhsh, S.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Ficorella, A.**, see Ratti, L., *TNS July 2020 1293-1301*
- Fioretti, A.**, see Mastroianni, S., *TNS May 2020 832-839*
- Fiorido, T.**, see Derraji, K., *TNS April 2020 568-574*
- Fiorini, C.**, see Hafizh, I., *TNS July 2020 1746-1759*
- Fish, A.**, see Haran, A., *TNS Aug. 2020 1803-1812*
- Fisher, B.**, see Lavelle, C.M., *TNS Jan. 2020 389-399*
- Flandre, D.**, see Alcalde Bessia, F., *TNS Oct. 2020 2217-2223*
- Flatte, M.E.**, see Moxim, S.J., *TNS Jan. 2020 228-233*
- Flatte, M.E.**, see Harmon, N.J., *TNS July 2020 1669-1673*
- Fleetwood, D.**, Brown, D., Quinn, H., Esqueda, I.S., Robinson, W., Moss, S., Goiffon, V., Paillet, P., and Ding, L., Special NSREC 2019 issue of the IEEE Transactions on Nuclear Science Editor Comments; *TNS Jan. 2020 7*
- Fleetwood, D.**, Brown, D., Quinn, H., Robinson, W., Moss, S., Goiffon, V., Paillet, P., and Ding, L., Comments by the Editors; *TNS July 2020 1201*
- Fleetwood, D.M.**, see Zhao, S.E., *TNS Jan. 2020 253-259*
- Fleetwood, D.M.**, see Gorchichko, M., *TNS Jan. 2020 245-252*
- Fleetwood, D.M.**, see Bonaldo, S., *TNS Jan. 2020 210-220*
- Fleetwood, D.M.**, Total-Ionizing-Dose Effects, Border Traps, and 1/f Noise in Emerging MOS Technologies; *TNS July 2020 1216-1240*
- Fleetwood, D.M.**, see Bonaldo, S., *TNS July 2020 1302-1311*
- Fleetwood, D.M.**, see Bonaldo, S., *TNS July 2020 1312-1319*
- Fleetwood, D.M.**, see Wang, P., *TNS Sept. 2020 2015-2020*
- Fleetwood, Z.E.**, see Nergui, D., *TNS Jan. 2020 91-98*
- Fleetwood, Z.E.**, see Ildefonso, A., *TNS July 2020 1521-1529*
- Fleismann, J.**, see Popovich, K., *TNS June 2020 962-968*
- Flintoft, I.**, see Dyer, A., *TNS June 2020 1139-1143*
- Flores, A.S.**, see Dewitte, H., *TNS July 2020 1284-1292*
- Fochuk, P.**, see Sklyarchuk, V., *TNS Nov. 2020 2439-2444*
- Fong, E.**, see Grace, C.R., *TNS May 2020 823-831*
- Foucard, G.**, see Ferraro, R., *TNS July 2020 1395-1403*
- Foxon, T.**, see Williams, J.O.D., *TNS Sept. 2020 1987-1992*
- Frajtag, P.**, see Vitullo, F., *TNS April 2020 625-635*
- Franco, F.J.**, Clemente, J.A., Korkian, G., Fabero, J.C., Mecha, H., and Velazco, R., Inherent Uncertainty in the Determination of Multiple Event Cross Sections in Radiation Tests; *TNS July 2020 1547-1554*
- Franco, F.J.**, see Fabero, J.C., *TNS July 2020 1461-1469*
- Franco, F.J.**, see Rezaei, M., *TNS Oct. 2020 2188-2195*
- Franco, F.J.**, see Korkian, G., *TNS Nov. 2020 2345-2352*
- Franco Lima, V.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Frangville, C.**, see Lynde, C., *TNS April 2020 679-687*
- Frey, M.**, see Klingbeil, H., *TNS Jan. 2020 361-368*
- Freyssinier, M.**, see Magne, S., *TNS April 2020 617-624*
- Fried, J.**, see Vernon, E., *TNS April 2020 752-759*
- Frost, C.**, see Bagatin, M., *TNS Jan. 2020 154-160*
- Frost, C.**, see Cao, J., *TNS July 2020 1436-1442*
- Frost, C.**, see Oliveira, D., *TNS June 2020 1161-1168*
- Frost, C.D.**, see Cazzaniga, C., *TNS Jan. 2020 175-180*
- Frounchi, M.**, see Tzintzarov, G.N., *TNS Jan. 2020 260-267*
- Frounchi, M.**, see Goley, P.S., *TNS Jan. 2020 296-304*
- Fu, J.**, see Cai, Y., *TNS Aug. 2020 1861-1868*
- Fucarino, A.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Fujieda, K.**, see Yoshino, M., *TNS June 2020 999-1002*
- Fujimoto, M.**, see Ali, K., *TNS Aug. 2020 1976-1984*
- Fujita, Y.**, see Kishishita, T., *TNS Sept. 2020 2089-2095*
- Funatsu, G.**, see Iwashita, H., *TNS Nov. 2020 2363-2369*
- Fung, R.**, see Cao, J., *TNS July 2020 1436-1442*
- Funk, W.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Furusaka, M.**, see Iwashita, H., *TNS Nov. 2020 2363-2369*
- Furuta, J.**, see Ebara, M., *TNS July 2020 1470-1477*

G

- Gabbanini, C.**, see Mastroianni, S., *TNS May 2020 832-839*
- Gabella, G.**, see Manfredi, J.J., *TNS Feb. 2020 434-442*
- Gaillard, R.**, see Alia, R.G., *TNS Jan. 2020 345-352*
- Gaillardin, M.**, see Girard, S., *TNS Jan. 2020 289-295*
- Gaillardin, M.**, see Goiffon, V., *TNS Jan. 2020 234-244*
- Gaillardin, M.**, see Rizzolo, S., *TNS July 2020 1256-1262*
- Gaillardin, M.**, see Riffaud, J., *TNS Oct. 2020 2172-2178*
- Gallas Torreira, A.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Galli, G.**, see Lynde, C., *TNS April 2020 679-687*
- Gallina, G.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Galloway, K.F.**, see Johnson, R.A., *TNS Jan. 2020 135-139*
- Galloway, K.F.**, see Austin, R.A., *TNS Jan. 2020 353-357*
- Galloway, K.F.**, see Ball, D.R., *TNS Jan. 2020 22-28*
- Galloway, K.F.**, see Shu, L., *TNS July 2020 1390-1394*
- Galloway, K.F.**, see Shu, L., *TNS June 2020 1133-1138*
- Galloway, K.F.**, see Shu, L., *TNS Nov. 2020 2392-2395*
- Galnander, B.**, see Nuns, T., *TNS July 2020 1263-1272*
- Galyaev, E.**, see Scheuer, K., *TNS Aug. 2020 1846-1851*
- Gao, J.**, see Wang, L., *TNS July 2020 1360-1364*
- Gao, J.**, see Wang, L., *TNS July 2020 1345-1350*
- Gao, J.**, see Lu, B., *TNS June 2020 1175-1184*
- Garay Trindade, M.**, see Possamai Bastos, R., *TNS July 2020 1404-1411*
- Garcia Alia, R.**, see Ferraro, R., *TNS July 2020 1395-1403*
- Garcia Alia, R.**, see Cecchetto, M., *TNS July 2020 1412-1420*
- Garcia Plana, B.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Garcia-Inza, M.**, see Carbonetto, S., *TNS June 2020 1118-1124*
- Garcia-Valderas, M.**, see Pena-Fernandez, M., *TNS Jan. 2020 126-134*
- Garcia-Valderas, M.**, see Pena-Fernandez, M., *TNS July 2020 1452-1460*
- Garg, P.**, see Azmoun, B., *TNS Aug. 2020 1869-1876*
- Gasiot, G.**, see Abouzeid, F., *TNS July 2020 1326-1331*
- Gautam, P.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Gavarri, J.**, see Derraji, K., *TNS April 2020 568-574*

- Gektin, A.**, Vasil'ev, A.N., Suzdal, V., and Sobolev, A., Energy Resolution of Scintillators in Connection With Track Structure; *TNS June 2020* 880-887
- George, J.S.**, see Auden, E.C., *TNS Jan. 2020* 29-37
- Gerardin, S.**, see Bagatin, M., *TNS Jan. 2020* 154-160
- Gerardin, S.**, see Zhao, S.E., *TNS Jan. 2020* 253-259
- Gerardin, S.**, see Bonaldo, S., *TNS Jan. 2020* 210-220
- Gerardin, S.**, see Bagatin, M., *TNS July 2020* 1421-1427
- Gerardin, S.**, see Bonaldo, S., *TNS July 2020* 1302-1311
- Gerardin, S.**, see Bonaldo, S., *TNS July 2020* 1312-1319
- Gerardin, S.**, see Cecchetto, M., *TNS July 2020* 1412-1420
- Gerbershagen, A.**, see Kastriotou, M., *TNS Jan. 2020* 63-70
- Germanicus, R.C.**, see Niskanen, K., *TNS July 2020* 1365-1373
- Gersabeck, M.**, see Fernandez Prieto, A., *TNS April 2020* 732-739
- Gershon, T.**, see Fernandez Prieto, A., *TNS April 2020* 732-739
- Geslot, B.**, see Obraztsova, O., *TNS May 2020* 863-871
- Ghawaly, J.M.**, see Nicholson, A.D., *TNS Aug. 2020* 1968-1975
- Giacomini, G.**, see Vernon, E., *TNS April 2020* 752-759
- Giacomini, G.**, see Lv, P., *TNS Dec. 2020* 2501-2510
- Gilardoni, S.**, see Alia, R.G., *TNS Jan. 2020* 345-352
- Gilbert, A.J.**, see Gillis, W.C., *TNS Nov. 2020* 2321-2328
- Gillis, W.C.**, Gilbert, A.J., Pazdernik, K., and Erickson, A., A Partial-Volume Correction for Quantitative Spectral X-Ray Radiography; *TNS Nov. 2020* 2321-2328
- Gioiosa, A.**, see Mastroianni, S., *TNS May 2020* 832-839
- Giordano, R.**, Perrella, S., Barbieri, D., and Izzo, V., A Radiation-Tolerant, Multigigabit Serial Link Based on FPGAs; *TNS Aug. 2020* 1852-1860
- Giovannella, S.**, see Atanov, N., *TNS June 2020* 978-982
- Girard, S.**, see Morana, A., *TNS Jan. 2020* 305-311
- Girard, S.**, De Michele, V., Alessi, A., Marcandella, C., Di Francesca, D., Paillet, P., Morana, A., Vidalot, J., Campanella, C., Agnello, S., Cannas, M., Gaillardin, M., Marin, E., Boukenter, A., and Ouerdane, Y., Transient and Steady-State Radiation Response of Phosphosilicate Optical Fibers: Influence of H₂ Loading; *TNS Jan. 2020* 289-295
- Girard, S.**, see Morana, A., *TNS Jan. 2020* 284-288
- Girard, S.**, see Aubry, M., *TNS Jan. 2020* 278-283
- Girard, S.**, see Dalla Betta, G., *TNS April 2020* 543
- Girard, S.**, see Morana, A., *TNS July 2020* 1637-1642
- Girard, S.**, see Campanella, C., *TNS July 2020* 1643-1649
- Girard, S.**, see Bahout, J., *TNS July 2020* 1658-1662
- Girard, S.**, see Dewitte, H., *TNS July 2020* 1284-1292
- Girard, S.**, see De Michele, V., *TNS July 2020* 1650-1657
- Giroux, J.**, see Whittaker, C., *TNS June 2020* 1040-1044
- Gisolfi, N.**, see Miller, J.K., *TNS Oct. 2020* 2278-2285
- Giterman, R.**, see Haran, A., *TNS Aug. 2020* 1803-1812
- Glagolev, V.**, see Atanov, N., *TNS June 2020* 978-982
- Glagolev, V.**, see Atanov, N., *TNS July 2020* 1760-1764
- Glorieux, M.**, see Alia, R.G., *TNS Jan. 2020* 345-352
- Gnemmi, G.**, Tsiligianis, G., Masi, A., and Danzeca, S., Reliability Analysis of Ethernet-Based Solutions for Data Transmission in the CERN Radiation Environment; *TNS July 2020* 1614-1622
- Gnyrya, V.S.**, see Kashaykin, P.F., *TNS Oct. 2020* 2162-2171
- Godignon, P.**, see Rafi, J.M., *TNS Dec. 2020* 2481-2489
- Goeders, J.**, see James, B., *TNS Jan. 2020* 321-327
- Goeldi, D.**, see Lv, P., *TNS Dec. 2020* 2501-2510
- Goethem, M.**, see James, B., *TNS Jan. 2020* 146-153
- Goiffon, V.**, see Fleetwood, D., *TNS Jan. 2020* 7
- Goiffon, V.**, Bilba, T., Deladerriere, T., Beaugendre, G., Le Roch, A., Dion, A., Virmontois, C., Belloir, J., Gaillardin, M., Jay, A., and Paillet, P., Radiation-Induced Variable Retention Time in Dynamic Random Access Memories; *TNS Jan. 2020* 234-244
- Goiffon, V.**, see Le Roch, A., *TNS Jan. 2020* 268-277
- Goiffon, V.**, see Le Roch, A., *TNS July 2020* 1241-1250
- Goiffon, V.**, see Fleetwood, D., *TNS July 2020* 1201
- Goiffon, V.**, see Rizzolo, S., *TNS July 2020* 1256-1262
- Goiffon, V.**, see Dewitte, H., *TNS July 2020* 1284-1292
- Goldblum, B.L.**, see Manfredi, J.J., *TNS Feb. 2020* 434-442
- Goldschmidt, A.**, see Grace, C.R., *TNS May 2020* 823-831
- Goley, P.S.**, see Tzintzarov, G.N., *TNS Jan. 2020* 260-267
- Goley, P.S.**, Dodds, N.A., Frounchi, M., Tzintzarov, G.N., Nowlin, R.N., and Cressler, J.D., Response of Waveguide-Integrated Germanium-on-Silicon p-i-n Photodiodes to Neutron Displacement Damage; *TNS Jan. 2020* 296-304
- Goley, P.S.**, see Nergui, D., *TNS Jan. 2020* 91-98
- Goley, P.S.**, see Ildefonso, A., *TNS Jan. 2020* 71-80
- Goncalves, M.M.**, Lamb, I.P., Rech, P., Brum, R.M., and Azambuja, J.R., Improving Selective Fault Tolerance in GPU Register Files by Relaxing Application Accuracy; *TNS July 2020* 1573-1580
- Goncalves, P.**, see Sampaio, J.M., *TNS Sept. 2020* 2028-2033
- Gong, H.**, see Ryder, L.D., *TNS Jan. 2020* 38-43
- Gong, H.**, see Gorchichko, M., *TNS Jan. 2020* 245-252
- Gong, W.**, see Liu, Z., *TNS Aug. 2020* 1904-1911
- Gong, Z.**, see Wang, L., *TNS July 2020* 1360-1364
- Gong, Z.**, see Wang, L., *TNS July 2020* 1345-1350
- Gonzalez, C.J.**, Added, N., Macchione, E.L.A., Aguiar, V.A.P., Kastensmidt, F.G.L., Puchner, H.K., Guazzelli, M.A., Medina, N.H., and Balen, T.R., Reducing Soft Error Rate of SoCs Analog-to-Digital Interfaces With Design Diversity Redundancy; *TNS March 2020* 518-524
- Good, J.H.**, see Miller, K., *TNS June 2020* 1185-1194
- Goodarzi, M.M.**, see Kaface, M., *TNS May 2020* 858-862
- Goodman, D.**, see Brown, S.T., *TNS Feb. 2020* 464-472
- Gorbenko, V.**, see Kurosawa, S., *TNS June 2020* 994-998
- Gorchichko, M.**, Cao, Y., Zhang, E.X., Yan, D., Gong, H., Zhao, S.E., Wang, P., Jiang, R., Liang, C., Fleetwood, D.M., Schrimpf, R.D., Reed, R.A., and Linten, D., Total-Ionizing-Dose Effects and Low-Frequency Noise in 30-nm Gate-Length Bulk and SOI FinFETs With SiO₂/HfO₂ Gate Dielectrics; *TNS Jan. 2020* 245-252
- Gorchichko, M.**, see Bonaldo, S., *TNS Jan. 2020* 210-220
- Gordon, J.**, see Manfredi, J.J., *TNS Feb. 2020* 434-442
- Gornea, R.**, see Lv, P., *TNS Dec. 2020* 2501-2510
- Gottwald, A.**, see Heymes, J., *TNS Aug. 2020* 1962-1967
- Goupillou, R.**, see Marchais, T., *TNS April 2020* 654-661
- Gouriou, T.**, see Ribiere, M., *TNS July 2020* 1722-1731
- Grabowski, A.**, see Lynde, C., *TNS April 2020* 679-687
- Grace, C.R.**, Denes, P., Fong, E., Goldschmidt, A., and Papadopoulou, A., A 4-MHz, 256-Channel Readout ASIC for Column-Parallel CCDs With 78.7-dB Dynamic Range; *TNS May 2020* 823-831
- Grancagnolo, F.**, see Atanov, N., *TNS June 2020* 978-982
- Grange, P.**, see Cheymol, G., *TNS April 2020* 552-558
- Grassi, G.**, see Ben Mosbah, M., *TNS April 2020* 662-668
- Gratta, G.**, see Lv, P., *TNS Dec. 2020* 2501-2510
- Grichine, V.M.**, GEANT4 Model for Heavy Baryon/Meson-Nucleon Cross Sections; *TNS Sept. 2020* 1993-1995
- Griffin, P.J.**, see Black, J.D., *TNS June 2020* 1125-1132
- Grodzicka, M.**, see Chewpraditkul, W., *TNS June 2020* 910-914
- Grosseuvres, R.**, see Magne, S., *TNS April 2020* 617-624
- Grossner, U.**, see Martinella, C., *TNS July 2020* 1381-1389
- Gruel, A.**, Ambrozic, K., Destouches, C., Radulovic, V., Sardet, A., and Snoj, L., Gamma-Heating and Gamma Flux Measurements in the JSI TRIGA Reactor: Results and Prospects; *TNS April 2020* 559-567
- Gu, C.**, see Zhang, Z., *TNS Sept. 2020* 2042-2050
- Gu, M.**, see He, N., *TNS Jan. 2020* 400-404
- Gu, M.**, see Hu, Y., *TNS Aug. 2020* 1899-1903
- Gu, R.**, see Wang, L., *TNS July 2020* 1360-1364
- Guan, X.**, see Wang, L., *TNS July 2020* 1360-1364
- Guan, X.**, see Chen, X., *TNS Aug. 2020* 1893-1898
- Guanying, W.**, see Wengang, S., *TNS July 2020* 1710-1714
- Guatelli, S.**, see Peracchi, S., *TNS Jan. 2020* 169-174
- Guatelli, S.**, see James, B., *TNS Jan. 2020* 146-153
- Guatelli, S.**, see Kok, A., *TNS Dec. 2020* 2490-2500
- Guazzelli, M.A.**, see Gonzalez, C.J., *TNS March 2020* 518-524
- Guinneton, F.**, see Derraji, K., *TNS April 2020* 568-574
- Gumus, C.**, see Bellandi, A., *TNS May 2020* 762-767
- Gundacker, S.**, see Yoshikawa, A., *TNS June 2020* 875
- Gundacker, S.**, see Tomanova, K., *TNS June 2020* 933-938

Guo, C., see Sun, L., *TNS Sept. 2020 2148-2154*
Guo, Q., see Ren, Z., *TNS July 2020 1320-1325*
Guo, Q., see Cai, Y., *TNS Aug. 2020 1861-1868*
Guo, X., see Wang, X., *TNS July 2020 1443-1451*
Gupta, A.K., see Jain, A., *TNS Nov. 2020 2303-2310*
Gusarov, A., see Davis, K.L., *TNS April 2020 585-591*
Gushchina, L., see Chewpraditkul, W., *TNS June 2020 904-909*
Guttilla, A., see Benabdesselam, M., *TNS July 2020 1663-1668*
Guttilla, A., see Campanella, C., *TNS July 2020 1643-1649*

H

Haard, T., see Lavelle, C.M., *TNS Jan. 2020 389-399*
Haberl, A.W., see Nelson, G.T., *TNS Sept. 2020 2051-2061*
Habert, R., see Bahout, J., *TNS July 2020 1658-1662*
Habib, A., Barbero, M., Barrillon, P., Bhat, S., Kugathanan, T., Pangaud, P., Pernegger, H., and Snoeys, W., Shunt Regulator for the Serial Powering of the ATLAS CMOS Pixel Detector Modules; *TNS Feb. 2020 455-463*
Hadad, N., see Pritchard, K., *TNS Jan. 2020 414-421*
Haefner, T.D., see Richards, E.W., *TNS June 2020 1144-1151*
Hafizh, I., Carminati, M., and Fiorini, C., TERA: Throughput-Enhanced Readout ASIC for High-Rate Energy-Dispersive X-Ray Detection; *TNS July 2020 1746-1759*
Hai, N.X., see Hung, D.T., *TNS Oct. 2020 2224-2230*
Hajdas, W., see Coronetti, A., *TNS July 2020 1606-1613*
Hajek, F., see Jary, V., *TNS June 2020 974-977*
Hales, J.M., see Ryder, K.L., *TNS Jan. 2020 57-62*
Hales, J.M., see Ildefonso, A., *TNS Jan. 2020 71-80*
Hales, J.M., Khachatrian, A., Buchner, S., Warner, J., Ildefonso, A., Tzintzarov, G.N., Nergui, D., Monahan, D.M., LaLumondiere, S.D., Cressler, J.D., and McMorrow, D., New Approach for Pulsed-Laser Testing That Mimics Heavy-Ion Charge Deposition Profiles; *TNS Jan. 2020 81-90*
Hamada, E., see Kishishita, T., *TNS Sept. 2020 2089-2095*
Hamel, M., see Lynde, C., *TNS April 2020 679-687*
Hampai, D., see Mastroianni, S., *TNS May 2020 832-839*
Hamzaoui, H.E., see Bahout, J., *TNS July 2020 1658-1662*
Han, H., see Chen, X., *TNS Aug. 2020 1893-1898*
Han, Z., see Wang, L., *TNS July 2020 1360-1364*
Han, Z., see Wang, L., *TNS July 2020 1345-1350*
Hands, A., see Dyer, A., *TNS June 2020 1139-1143*
Hands, A.D.P., Ryden, K.A., Sandberg, I., Heynderickx, D., Provatias, G., Aminalragia-Giamini, S., Tsigkanos, A., Papadimitriou, C., Rodgers, D., and Evans, H., An Update to MOBE-DIC Using Current Monitor Measurements From Galileo; *TNS Jan. 2020 181-190*
Hansen, D.L., Design-of-Experiments and Monte-Carlo Methods in Upset Rate-Calculations; *TNS Jan. 2020 336-344*
Hansen, E.V., see Lv, P., *TNS Dec. 2020 2501-2510*
Happacher, F., see Atanov, N., *TNS June 2020 978-982*
Harada, M., see Kuroda, J., *TNS July 2020 1599-1605*
Haran, A., Keren, E., David, D., Refaeli, N., Giterman, R., Assaf, M., Atias, L., Teman, A., and Fish, A., Single-Event Upset Tolerance Study of a Low-Voltage 13T Radiation-Hardened SRAM Bitcell; *TNS Aug. 2020 1803-1812*
Hare, R.J., see Smith, J.A., *TNS May 2020 797-804*
Harkut, O., see Uhlar, R., *TNS Jan. 2020 382-388*
Harmon, N.J., see Moxim, S.J., *TNS Jan. 2020 228-233*
Harmon, N.J., Mcmillan, S.R., Ashton, J.P., Lenahan, P.M., and Flatte, M.E., Modeling of Near Zero-Field Magnetoresistance and Electrically Detected Magnetic Resonance in Irradiated Si/SiO₂ MOSFETs; *TNS July 2020 1669-1673*
Harokova, P., see Uhlar, R., *TNS Jan. 2020 382-388*
Harris, A., see Heymes, J., *TNS Aug. 2020 1962-1967*
Hashimoto, M., see Mahara, T., *TNS July 2020 1555-1559*
Hashimoto, M., see Kato, T., *TNS July 2020 1485-1493*
Hashimoto, M., see Kuroda, J., *TNS July 2020 1599-1605*
Hashimoto, M., see Liao, W., *TNS July 2020 1566-1572*
Hattar, K., see Kumari, P., *TNS Sept. 2020 2021-2027*
Hawrami, R., Ariesanti, E., Buliga, V., Motakef, S., and Burger, A., Latest Progress on Advanced Bridgman Method-Grown K₂PtCl₆ Cubic Structure Scintillator Crystals; *TNS June 2020 1020-1026*
Hayakawa, T., see Ali, K., *TNS Aug. 2020 1976-1984*
Hayashi, M., see Kodama, S., *TNS June 2020 1055-1062*
Hayward, J.P., see Wen, X., *TNS Sept. 2020 2081-2088*
Hayward, J.P., see Decker, A.W., *TNS Nov. 2020 2329-2336*
He, N., Xu, M., Tang, H., Liu, B., Zhu, Z., Gu, M., Xu, J., Liu, J., Chen, L., and Ouyang, X., Scintillation Properties of β -Ga₂O₃ Single Crystal Excited by α -Ray; *TNS Jan. 2020 400-404*
He, Z., see Cai, C., *TNS Jan. 2020 374-381*
He, Z., see Brown, S.T., *TNS Feb. 2020 464-472*
He, Z., see Shy, D., *TNS Aug. 2020 1920-1928*
Heffner, M., see Lv, P., *TNS Dec. 2020 2501-2510*
Hehr, B.D., see Jasica, M.J., *TNS Jan. 2020 221-227*
Heidrich, B.J., see Davis, K.L., *TNS April 2020 585-591*
Heidtmann, D., see Hendrickson, B., *TNS July 2020 1732-1737*
Helena Mendes, L., see Fernandez Prieto, A., *TNS April 2020 732-739*
Hellfeld, D., see Vavrek, J.R., *TNS Nov. 2020 2421-2430*
Hemeryck, A., see Jarrin, T., *TNS July 2020 1273-1283*
Hemmick, T.K., see Azmoun, B., *TNS Aug. 2020 1869-1876*
Henderson, K., Liu, X., Stadnikia, K., Martin, A., Enqvist, A., and Koppal, S.J., Proximity-Based Sensor Fusion of Depth Cameras and Isotropic Rad-Detectors; *TNS May 2020 840-857*
Hendrickson, B., Widenhorn, R., Blouke, M., Heidtmann, D., and Bodegom, E., Wavelet Analysis of RTS Noise in CMOS Image Sensors Irradiated With High-Energy Photons; *TNS July 2020 1732-1737*
Hennessey, K., see Fernandez Prieto, A., *TNS April 2020 732-739*
Herz kamp, M., see Kumar, S., *TNS June 2020 1169-1174*
Heymes, J., Soman, M., Randall, G., Gottwald, A., Harris, A., Kelt, A., Moody, I., Meng, X., and Holland, A.D., Comparison of Back-Thinned Detector Ultraviolet Quantum Efficiency for Two Commercially Available Passivation Treatments; *TNS Aug. 2020 1962-1967*
Heynderickx, D., see Hands, A.D.P., *TNS Jan. 2020 181-190*
Higuchi, M., see Morishita, Y., *TNS Oct. 2020 2203-2208*
Hirose, K., see Kobayashi, D., *TNS Jan. 2020 328-335*
Hitlin, D., see Atanov, N., *TNS June 2020 978-982*
Hobl, J., see Lv, P., *TNS Dec. 2020 2501-2510*
Hoehr, C., see Belanger-Champagne, C., *TNS Jan. 2020 161-168*
Hoff, J., see Deptuch, G., *TNS Sept. 2020 2111-2118*
Hok, S., see O'Neal, S., *TNS April 2020 746-751*
Hok, S., see Decker, A.W., *TNS Nov. 2020 2329-2336*
Holland, A.D., see Meng, X., *TNS June 2020 1117-1113*
Holland, A.D., see Heymes, J., *TNS Aug. 2020 1962-1967*
Holman, W.T., see Richards, E.W., *TNS June 2020 1144-1151*
Holmes, J., see Scheuer, K., *TNS Aug. 2020 1846-1851*
Hoppe, E.W., see Lv, P., *TNS Dec. 2020 2501-2510*
Horiai, T., see Chewpraditkul, W., *TNS June 2020 904-909*
Hospodkova, A., see Jary, V., *TNS June 2020 974-977*
Hostetter, C.A., see Smith, J.A., *TNS May 2020 797-804*
House, A., see Lv, P., *TNS Dec. 2020 2501-2510*
Howarth, D., see Miller, K., *TNS June 2020 1185-1194*
Hoyos, B., see Bourdarie, S., *TNS Oct. 2020 2196-2202*
Hsu, C., see Xu, R., *TNS April 2020 698-707*
Hu, C., Zhang, L., Zhu, R., Chen, J., Ding, D., Wang, Y., and Zhang, M., Spatial Resolution of an Inorganic Crystal-Based Hard X-Ray Imager; *TNS June 2020 1014-1019*
Hu, C., Yang, F., Zhang, L., Zhu, R., Kapustinsky, J., Mocko, M., Nelson, R., and Wang, Z., Neutron-Induced Radiation Damage in LYSO, BaF₂, and PWO Crystals; *TNS June 2020 1086-1092*
Hu, L., see Yue, S., *TNS July 2020 1339-1344*
Hu, Y., Gu, M., Li, Q., Liu, X., Zhang, J., Huang, S., and Liu, B., Influence of Annealing Temperature on the Performance of Lu₂O₃:Eu³⁺ Nanowire Arrays Synthesized by Sol-Gel Method Using AAO Template; *TNS Aug. 2020 1899-1903*
Hu, Z., see Bi, D., *TNS Nov. 2020 2337-2344*
Huang, G., see Wei, Y., *TNS June 2020 939-945*

Huang, G.S., see Dai, H.T., *TNS June 2020 956-961*
Huang, H., see Cai, C., *TNS Jan. 2020 374-381*
Huang, J., see Pan, L., *TNS Feb. 2020 443-449*
Huang, J., see Pan, L., *TNS Oct. 2020 2255-2262*
Huang, R., see Ren, Z., *TNS July 2020 1320-1325*
Huang, S., see Hu, Y., *TNS Aug. 2020 1899-1903*
Huang, S., see Kumari, P., *TNS Sept. 2020 2021-2027*
Huang, X., see Dong, Z., *TNS Aug. 2020 1780-1790*
Huang, Y., see Wang, L., *TNS July 2020 1360-1364*
Huang, Y., see Wang, L., *TNS July 2020 1345-1350*
Hubacek, T., see Jary, V., *TNS June 2020 974-977*
Hubbard, S.M., see Nelson, G.T., *TNS Sept. 2020 2051-2061*
Hubert, G., and Artola, L., Study of Secondary Scattering/Albedo Neutron Fields and Their Impacts on SER as Function of Scene Topologies; *TNS Jan. 2020 201-209*
Hubert, G., see Fabero, J.C., *TNS July 2020 1461-1469*
Hubert, G., see Rezaei, M., *TNS Oct. 2020 2188-2195*
Hubert, G., see Korkian, G., *TNS Nov. 2020 2345-2352*
Hughes, M., see Lv, P., *TNS Dec. 2020 2501-2510*
Hulsbergen, W., see Fernandez Prieto, A., *TNS April 2020 732-739*
Hulsmann, P., see Klingbeil, H., *TNS Jan. 2020 361-368*
Hung, D.T., Van Hiep, C., Khang, P.D., Hai, N.X., Anh, N.N., Tan, T.D., Chien, D.K., Dien, N.N., and Anh, N.T., A Confident Configuration for an Environmental Radiation Monitoring System; *TNS Oct. 2020 2224-2230*
Huo, J., see Lu, B., *TNS June 2020 1175-1184*
Huot, N., see Cheymol, G., *TNS April 2020 669-678*
Huot, N., see Cheymol, G., *TNS June 2020 1195*
Hurlbut, C., see Pritchard, K., *TNS Jan. 2020 414-421*
Hutchcroft, D., see Fernandez Prieto, A., *TNS April 2020 732-739*
Hutson, J.M., see Ball, D.R., *TNS Jan. 2020 22-28*
Hynds, D., see Fernandez Prieto, A., *TNS April 2020 732-739*

I

Iacovacci, M., see Mastroianni, S., *TNS May 2020 832-839*
Iancu, V., see Ali, K., *TNS Aug. 2020 1976-1984*
Ichikawa, A.K., see Nakamura, K.Z., *TNS July 2020 1772-1776*
Ichimura, K., Sekiya, H., Pedersen, J.W., Yamaji, A., and Kurosawa, S., Measurement of the Anisotropic Response of the ZnWO₄ Crystal for Developing the Direction-Sensitive Dark Matter Detector; *TNS June 2020 894-897*
Ifergan, Y., see Wengrowicz, U., *TNS April 2020 599-602*
Ignatyev, A.D., see Kashaykin, P.F., *TNS Oct. 2020 2162-2171*
Ikeno, M., see Nakamura, K.Z., *TNS July 2020 1772-1776*
Ildefonso, A., see Tzintzarov, G.N., *TNS Jan. 2020 260-267*
Ildefonso, A., see Nergui, D., *TNS Jan. 2020 91-98*
Ildefonso, A., Tzintzarov, G.N., Nergui, D., Omprakash, A.P., Goley, P.S., Hales, J.M., Khachatryan, A., Buchner, S.P., McMorro, D., Warner, J.H., and Cressler, J.D., Comparison of Single-Event Transients in SiGe HBTs on Bulk and Thick-Film SOI; *TNS Jan. 2020 71-80*
Ildefonso, A., see Hales, J.M., *TNS Jan. 2020 81-90*
Ildefonso, A., Tzintzarov, G.N., Lourenco, N.E., Fleetwood, Z.E., Khachatryan, A., Buchner, S.P., McMorro, D., Warner, J.H., Kaynak, M., and Cressler, J.D., Tradeoffs Between RF Performance and SET Robustness in Low-Noise Amplifiers in a Complementary SiGe BiCMOS Platform; *TNS July 2020 1521-1529*
Inanc, F., see Anniyev, T., *TNS Aug. 2020 1885-1892*
Incagli, M., see Mastroianni, S., *TNS May 2020 832-839*
Infantino, A., see Alia, R.G., *TNS Jan. 2020 345-352*
Infantino, A., see Ferraro, R., *TNS July 2020 1395-1403*
Inguibert, C., see Caron, P., *TNS Jan. 2020 44-49*
Inguibert, C., see Nuns, T., *TNS July 2020 1263-1272*
Irazaqui, J., see Alcalde Bessia, F., *TNS Oct. 2020 2217-2223*
Ishii, S., see Kobayashi, D., *TNS Jan. 2020 328-335*
Ito, K., see Kuroda, J., *TNS July 2020 1599-1605*
Itoh, R., see Liu, Z., *TNS Aug. 2020 1904-1911*
Ivanov, S., see Atanov, N., *TNS July 2020 1760-1764*
Iverson, A., see Lv, P., *TNS Dec. 2020 2501-2510*

Iwasaki, Y., see Lee, I.S., *TNS Sept. 2020 2143-2147*
Iwashita, H., Funatsu, G., Sato, H., Kamiyama, T., Furusaka, M., Wender, S.A., Pitcher, E., and Kiyonagi, Y., Energy-Resolved Soft-Error Rate Measurements for 1–800 MeV Neutrons by the Time-of-Flight Technique at LAN-SCS; *TNS Nov. 2020 2363-2369*
Iyer, S.S., see Brewer, R.M., *TNS Jan. 2020 108-115*
Izaki, K., see Morishita, Y., *TNS Oct. 2020 2203-2208*
Izzo, V., see Giordano, R., *TNS Aug. 2020 1852-1860*

J

Jackson, M., see Peracchi, S., *TNS Jan. 2020 169-174*
Jackson, M., see James, B., *TNS Jan. 2020 146-153*
Jackson, M., see Pritchard, K., *TNS Jan. 2020 414-421*
Jackson, M., see Biasi, G., *TNS March 2020 534-540*
Jain, A., Sharma, D.K., Gupta, A.K., and Lad, M., A 150-kW Pulse Solid-State Amplifier for Radio Frequency Quadrupole Application; *TNS Nov. 2020 2303-2310*
Jakubec, I., see Tomanova, K., *TNS June 2020 933-938*
Jalocha, P., see Fernandez Prieto, A., *TNS April 2020 732-739*
James, B., see Peracchi, S., *TNS Jan. 2020 169-174*
James, B., Quinn, H., Wirthlin, M., and Goeders, J., Applying Compiler-Automated Software Fault Tolerance to Multiple Processor Platforms; *TNS Jan. 2020 321-327*
James, B., Tran, L.T., Bolst, D., Peracchi, S., Davis, J.A., Prokopovich, D.A., Guatelli, S., Petasacca, M., Lerch, M., Povoli, M., Kok, A., Goethem, M., Nancarrow, M., Matsufuji, N., Jackson, M., and Rosenfeld, A.B., SOI Thin Microdosimeters for High LET Single-Event Upset Studies in Fe, O, Xe, and Cocktail Ion Beam Fields; *TNS Jan. 2020 146-153*
James, R.B., see Sklyarchuk, V., *TNS Nov. 2020 2439-2444*
Jamil, A., see Lv, P., *TNS Dec. 2020 2501-2510*
Jang, E.J., see Lee, I.S., *TNS Sept. 2020 2143-2147*
Jansson, P., see Dalla Betta, G., *TNS April 2020 543*
Jarrin, T., Jay, A., Raine, M., Mousseau, N., Hemeryck, A., and Richard, N., Simulation of Single Particle Displacement Damage in Si_{1-x}Ge_x Alloys—Interaction of Primary Particles With the Material and Generation of the Damage Structure; *TNS July 2020 1273-1283*
Jary, V., see Yoshikawa, A., *TNS June 2020 875*
Jary, V., Hospodkova, A., Hubacek, T., Hajek, F., Blazek, K., and Nikl, M., Optical Properties of InGaN/GaN Multiple Quantum Well Structures Grown on GaN and Sapphire Substrates; *TNS June 2020 974-977*
Jasica, M.J., Wampler, W.R., Vizkelethy, G., Hehr, B.D., and Bielejec, E.S., Photocurrent From Single Collision 14-MeV Neutrons in GaN and GaAs; *TNS Jan. 2020 221-227*
Jatczak, P., see Sikora, D., *TNS Sept. 2020 2136-2142*
Javanainen, A., see Johnson, R.A., *TNS Jan. 2020 135-139*
Javanainen, A., see Alia, R.G., *TNS Jan. 2020 345-352*
Javanainen, A., see Ball, D.R., *TNS Jan. 2020 22-28*
Javanainen, A., see Martinella, C., *TNS July 2020 1381-1389*
Javanainen, A., see Niskanen, K., *TNS July 2020 1365-1373*
Javanainen, A., see Coronetti, A., *TNS July 2020 1606-1613*
Jay, A., see Goiffon, V., *TNS Jan. 2020 234-244*
Jay, A., see Jarrin, T., *TNS July 2020 1273-1283*
Jayawardena, K.D.G.I., see Thirimanne, H.M., *TNS Oct. 2020 2238-2245*
Je, M., see Jeon, H., *TNS July 2020 1738-1745*
Jeon, H., Kwon, I., and Je, M., Radiation-Hardened Sensor Interface Circuit for Monitoring Severe Accidents in Nuclear Power Plants; *TNS July 2020 1738-1745*
Jewell, M.J., see Lv, P., *TNS Dec. 2020 2501-2510*
Jian, Y., see Li, L., *TNS March 2020 508-517*
Jian, Y., see Li, L., *TNS Aug. 2020 1826-1834*
Jiang, N., see Wei, Q., *TNS Feb. 2020 450-454*
Jiang, P., see Wei, Y., *TNS June 2020 939-945*
Jiang, P.C., see Dai, H.T., *TNS June 2020 956-961*
Jiang, R., see Gorchichko, M., *TNS Jan. 2020 245-252*
Jiang, X.S., see Lv, P., *TNS Dec. 2020 2501-2510*
Jiang, Y., see Xu, Z., *TNS Feb. 2020 425-433*

- Jiang, Z.**, see Fan, Y., *TNS Oct. 2020 2246-2254*
- Jin, H.**, see Wu, M., *TNS April 2020 708-715*
- Jindariani, S.**, see Deptuch, G., *TNS Sept. 2020 2111-2118*
- Jmerik, V.**, see Atanov, N., *TNS July 2020 1760-1764*
- Jo, A.**, and Lee, W., X-Ray Fluorescence Imaging Based on CdTe Detector Array for Analysis of Various Materials; *TNS Dec. 2020 2523-2534*
- Johanson, R.E.**, see Simonson, B., *TNS Nov. 2020 2445-2453*
- Johansson, T.**, see Preston, M., *TNS June 2020 1093-1106*
- John, A.K.**, and Bhattacharjee, A.K., Qualification of Hardware Description Language Designs for Safety Critical Applications in Nuclear Power Plants; *TNS March 2020 502-507*
- John, M.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Johnson, R.A.**, Witulski, A.F., Ball, D.R., Galloway, K.F., Sternberg, A.L., Reed, R.A., Schrimpf, R.D., Alles, M.L., Lauenstein, J., Javanainen, A., Raman, A., Chakraborty, P.S., and Arslanbekov, R.R., Unifying Concepts for Ion-Induced Leakage Current Degradation in Silicon Carbide Schottky Power Diodes; *TNS Jan. 2020 135-139*
- Johnson, R.A.**, see Ball, D.R., *TNS Jan. 2020 22-28*
- Joo, K.K.**, see Shin, C.D., *TNS Sept. 2020 1996-2002*
- Jordan, S.L.**, see Wang, P., *TNS Sept. 2020 2015-2020*
- Joshi, S.**, see Deptuch, G., *TNS Sept. 2020 2111-2118*
- Joshi, T.H.Y.**, see Bandstra, M.S., *TNS May 2020 777-790*
- Joshi, T.H.Y.**, see Vavrek, J.R., *TNS Nov. 2020 2421-2430*
- Joung, S.**, see Kim, Y., *TNS April 2020 592-598*
- Joyce, M.**, see Dalla Betta, G., *TNS April 2020 543*
- Jun, B.**, Zhu, B.X., Martinez-Sierra, L.M., and Jun, I., Intercomparison of Ionizing Doses From Space Shielding Analyses Using MCNP, Geant4, FASTRAD, and NOVICE; *TNS July 2020 1629-1636*
- Jun, I.**, see Jun, B., *TNS July 2020 1629-1636*
- Jung, S.**, Lee, J., Cho, H., Kim, T., and Ye, S., Compton Background Elimination for in Vivo X-Ray Fluorescence Imaging of Gold Nanoparticles Using Convolutional Neural Network; *TNS Nov. 2020 2311-2320*
- Jurik, N.**, see Fernandez Prieto, A., *TNS April 2020 732-739*

K

- Kadi, Y.**, see Di Francesca, D., *TNS Jan. 2020 140-145*
- Kadi, Y.**, see Martinella, C., *TNS July 2020 1381-1389*
- Kadi, Y.**, see Bilko, K., *TNS July 2020 1682-1690*
- Kadi, Y.**, see Cecchetto, M., *TNS July 2020 1412-1420*
- Kadmon, Y.**, see Wengrowicz, U., *TNS April 2020 599-602*
- Kadmon, Y.**, see Vax, E., *TNS April 2020 544-551*
- Kaewjaeng, S.**, see Aryal, P., *TNS June 2020 922-926*
- Kaewkhao, J.**, see Aryal, P., *TNS June 2020 922-926*
- Kafaee, M.**, and Goodarzi, M.M., Pile-Up Correction in Spectroscopic Signals Using Regularized Sparse Reconstruction; *TNS May 2020 858-862*
- Kaftandjian, V.**, see Xie, B., *TNS June 2020 1066-1075*
- Kalani, S.**, see Xu, R., *TNS April 2020 698-707*
- Kalter, J.**, see Lavelle, C.M., *TNS Jan. 2020 389-399*
- Kalyani, Tyagi, M.**, Rawat, S., Singh, A.K., Patel, T., Sarkar, P.S., Desai, S.S., and Kumar, G.A., Thermal Neutron Discrimination Using a Novel Phoswich Detector of Gd₃Ga₃Al₂O₁₂:Ce,B and CsI:TI Single Crystals; *TNS Nov. 2020 2415-2420*
- Kamada, K.**, see Chewpraditkul, W., *TNS June 2020 910-914*
- Kamada, K.**, see Chewpraditkul, W., *TNS June 2020 904-909*
- Kamada, K.**, see Kodama, S., *TNS June 2020 1055-1062*
- Kamada, K.**, see Ueno, M., *TNS June 2020 1045-1048*
- Kamada, K.**, see Yoshino, M., *TNS June 2020 999-1002*
- Kamada, K.**, see Otaka, Y., *TNS June 2020 988-993*
- Kamada, K.**, see Yamaji, A., *TNS June 2020 1027-1031*
- Kamada, K.**, see Sakthong, O., *TNS Oct. 2020 2295-2299*
- Kamiyama, T.**, see Iwashita, H., *TNS Nov. 2020 2363-2369*
- Kandemir, K.**, see Di Francesca, D., *TNS Jan. 2020 140-145*
- Kandlakunta, P.**, see Pan, L., *TNS Feb. 2020 443-449*
- Kaneko, J.H.**, see Morishita, Y., *TNS Oct. 2020 2203-2208*
- Kaplon, u.**, Technical Attenuation Length Measurement of Plastic Scintillator Strips for the Total-Body J-PET Scanner; *TNS Oct. 2020 2286-2289*
- Kapustinsky, J.**, see Hu, C., *TNS June 2020 1086-1092*
- Karamyshev, O.**, see Chen, G., *TNS Jan. 2020 369-373*
- Karamysheva, G.**, see Chen, G., *TNS Jan. 2020 369-373*
- Karelin, A.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Karuza, M.**, see Mastroianni, S., *TNS May 2020 832-839*
- Kasap, S.O.**, see Simonson, B., *TNS Nov. 2020 2445-2453*
- Kashaykin, P.F.**, Tomashuk, A.L., Vasiliev, S.A., Britskiy, V.A., Ignatyev, A.D., Ponkratov, Y.V., Kulsartov, T.V., Samarkhanov, K.K., Gnyrya, V.S., Zarenbin, A.V., and Semjonov, S.L., Radiation Resistance of Single-Mode Optical Fibers at $\lambda = 1.55 \mu\text{m}$ Under Irradiation at IVG.1M Nuclear Reactor; *TNS Oct. 2020 2162-2171*
- Kashchuk, Y.A.**, see Fedorov, V.A., *TNS April 2020 688-693*
- Kastensmidt, F.G.L.**, see Gonzalez, C.J., *TNS March 2020 518-524*
- Kastensmidt, F.L.**, see de Oliveira, A.B., *TNS July 2020 1503-1510*
- Kastensmidt, F.L.**, see Aguiar, Y.Q., *TNS July 2020 1581-1589*
- Kastriotou, M.**, Fernandez-Martinez, P., Alia, R.G., Cazzaniga, C., Cecchetto, M., Coronetti, A., Lerner, G., Tali, M., Kerboub, N., Wyrwoll, V., Bernhard, J., Danzeca, S., Ferlet-Cavrois, V., Gerbershagen, A., and Wilkens, H., Single Event Effect Testing With Ultrahigh Energy Heavy Ion Beams; *TNS Jan. 2020 63-70*
- Kastriotou, M.**, see Alia, R.G., *TNS Jan. 2020 345-352*
- Kastriotou, M.**, see Cazzaniga, C., *TNS Jan. 2020 175-180*
- Kastriotou, M.**, see Bagatin, M., *TNS July 2020 1421-1427*
- Kastriotou, M.**, see Wyrwoll, V., *TNS July 2020 1590-1598*
- Kastriotou, M.**, see Wyrwoll, V., *TNS July 2020 1530-1539*
- Kataoka, J.**, see Yoshino, M., *TNS June 2020 999-1002*
- Kato, T.**, Hashimoto, M., and Matsuyama, H., Angular Sensitivity of Neutron-Induced Single-Event Upsets in 12-nm FinFET SRAMs With Comparison to 20-nm Planar SRAMs; *TNS July 2020 1485-1493*
- Katoh, M.**, see Ali, K., *TNS Aug. 2020 1976-1984*
- Kaufman, L.J.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Kaupila, J.S.**, see Richards, E.W., *TNS June 2020 1144-1151*
- Kavatsyuk, M.**, see Preston, M., *TNS June 2020 1093-1106*
- Kawasaki, O.**, see Kobayashi, D., *TNS Jan. 2020 328-335*
- Kaynak, M.**, see Tzintzarov, G.N., *TNS Jan. 2020 260-267*
- Kaynak, M.**, see Ildefonso, A., *TNS July 2020 1521-1529*
- Ke, L.**, see Cai, C., *TNS Jan. 2020 374-381*
- Kebbiri, M.**, see Azmoun, B., *TNS Aug. 2020 1869-1876*
- Keller, A.M.**, see Cannon, M.J., *TNS Jan. 2020 312-320*
- Kelt, A.**, see Heymes, J., *TNS Aug. 2020 1962-1967*
- Kenesei, P.**, see Marshall, M.S.J., *TNS June 2020 969-973*
- Kerboub, N.**, see Kastriotou, M., *TNS Jan. 2020 63-70*
- Kerboub, N.**, see Alia, R.G., *TNS Jan. 2020 345-352*
- Kerboub, N.**, see Wyrwoll, V., *TNS July 2020 1590-1598*
- Keren, E.**, see Haran, A., *TNS Aug. 2020 1803-1812*
- Kettering, H.**, see Nergui, D., *TNS Jan. 2020 91-98*
- Kettunen, H.**, see Alia, R.G., *TNS Jan. 2020 345-352*
- Khbasheshku, V.**, see Anniyev, T., *TNS Aug. 2020 1885-1892*
- Khachatrian, A.**, see Tzintzarov, G.N., *TNS Jan. 2020 260-267*
- Khachatrian, A.**, see Ryder, K.L., *TNS Jan. 2020 57-62*
- Khachatrian, A.**, see Ildefonso, A., *TNS Jan. 2020 71-80*
- Khachatrian, A.**, see Hales, J.M., *TNS Jan. 2020 81-90*
- Khachatrian, A.**, see Ildefonso, A., *TNS July 2020 1521-1529*
- Khan, A.**, see Aryal, P., *TNS June 2020 922-926*
- Khan, A.**, see Daniel, D.J., *TNS June 2020 898-903*
- Khan, A.**, see Vuong, P.Q., *TNS Oct. 2020 2290-2294*
- Khan, S.**, see Pandey, I.R., *TNS June 2020 915-921*
- Khan, S.**, see Vuong, P.Q., *TNS Oct. 2020 2290-2294*
- Khang, P.D.**, see Hung, D.T., *TNS Oct. 2020 2224-2230*
- Khanin, V.**, see Wiczorek, H., *TNS Aug. 2020 1934-1945*
- Kharusi, S.A.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Kii, T.**, see Ali, K., *TNS Aug. 2020 1976-1984*
- Kim, C.H.**, see Pande, N., *TNS Jan. 2020 116-125*
- Kim, C.H.**, see Lee, I.S., *TNS Sept. 2020 2143-2147*
- Kim, H.J.**, see Aryal, P., *TNS June 2020 922-926*
- Kim, H.J.**, see Pandey, I.R., *TNS June 2020 915-921*
- Kim, H.J.**, see Daniel, D.J., *TNS June 2020 898-903*

- Kim, H.J.**, see Vuong, P.Q., *TNS Oct. 2020 2290-2294*
- Kim, J.**, see Vuong, P.Q., *TNS Oct. 2020 2290-2294*
- Kim, K.J.**, see Ueno, M., *TNS June 2020 1045-1048*
- Kim, M.**, see Kim, Y., *TNS April 2020 592-598*
- Kim, S.H.**, see Lee, I.S., *TNS Sept. 2020 2143-2147*
- Kim, S.H.**, see Vuong, P.Q., *TNS Oct. 2020 2290-2294*
- Kim, T.**, see Jung, S., *TNS Nov. 2020 2311-2320*
- Kim, Y.**, Joung, S., Kim, M., Chung, H., and Park, S., Determination of Uranium Enrichment Using a Plastic Scintillator; *TNS April 2020 592-598*
- Kim, Y.D.**, see Pandey, I.R., *TNS June 2020 915-921*
- Kim, Y.J.**, see Lee, I.S., *TNS Sept. 2020 2143-2147*
- King, S.W.**, see Moxim, S.J., *TNS Jan. 2020 228-233*
- Kinget, P.**, see Xu, R., *TNS April 2020 698-707*
- Kirm, M.**, see Saaring, J., *TNS June 2020 1009-1013*
- Kiselev, A.**, see Azmoun, B., *TNS Aug. 2020 1869-1876*
- Kishimoto, S.**, see Toda, A., *TNS June 2020 983-987*
- Kishishita, T.**, Sato, Y., Fujita, Y., Hamada, E., Mibe, T., Nagasawa, T., Shirabe, S., Shoji, M., Suehara, T., Tanaka, M.M., Tojo, J., Tsutumi, Y., Yamanaka, T., and Yoshioka, T., SLiT: A Strip-Sensor Readout Chip With Subnanosecond Time Walk for the J-PARC Muon $g - 2$ /EDM Experiment; *TNS Sept. 2020 2089-2095*
- Kistler, M.**, see Tisseur, D., *TNS July 2020 1715-1721*
- Kiyanaagi, Y.**, see Iwashita, H., *TNS Nov. 2020 2363-2369*
- Kleparnik, K.**, see Popovich, K., *TNS June 2020 962-968*
- Kleppinger, J.W.**, see Sajjad, M., *TNS Aug. 2020 1946-1951*
- Klingbeil, H.**, Schweickhardt, J., Balb, R., Frey, M., and Hulsmann, P., Design Process for Synchrotron RF Cavities Loaded With Magnetic Ring Cores; *TNS Jan. 2020 361-368*
- Kobayashi, D.**, Hirose, K., Sakamoto, K., Okamoto, S., Baba, S., Shindou, H., Kawasaki, O., Makino, T., Ohshima, T., Mori, Y., Matsuura, D., Kusano, M., Narita, T., and Ishii, S., Data-Retention-Voltage-Based Analysis of Systematic Variations in SRAM SEU Hardness: A Possible Solution to Synergistic Effects of TID; *TNS Jan. 2020 328-335*
- Kobayashi, K.**, see Ebara, M., *TNS July 2020 1470-1477*
- Kobera, L.**, see Popovich, K., *TNS June 2020 962-968*
- Kochurikhin, V.**, see Kodama, S., *TNS June 2020 1055-1062*
- Kochurikhin, V.V.**, see Ueno, M., *TNS June 2020 1045-1048*
- Kodama, S.**, Kurosawa, S., Morishita, Y., Usami, H., Torii, T., Hayashi, M., Sasano, M., Azuma, T., Tanaka, H., Kochurikhin, V., Pejchal, J., Kral, R., Yoshino, M., Yamaji, A., Toyoda, S., Sato, H., Ohashi, Y., Yokota, Y., Kamada, K., Nikl, M., and Yoshikawa, A., Growth and Scintillation Properties of a New Red-Emitting Scintillator Rb_2HfF_6 for the Fiber-Reading Radiation Monitor; *TNS June 2020 1055-1062*
- Koffas, T.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Kohler, P.**, see Rajkowski, T., *TNS July 2020 1494-1502*
- Kojima, K.**, see Ebara, M., *TNS July 2020 1470-1477*
- Kok, A.**, see Peracchi, S., *TNS Jan. 2020 169-174*
- Kok, A.**, see James, B., *TNS Jan. 2020 146-153*
- Kok, A.**, Povoli, M., Summanwar, A., Tran, L.T., Petasecca, M., Lerch, M.L.F., Bolst, D., Guatelli, S., and Rosenfeld, A.B., Fabrication and First Characterization of Silicon-Based Full 3-D Microdosimeters; *TNS Dec. 2020 2490-2500*
- Komanome, H.**, see Watanabe, T., *TNS Aug. 2020 1835-1845*
- Kondo, H.**, see Sugiyama, H., *TNS June 2020 1035-1039*
- Kong, L.**, see Zhang, J., *TNS July 2020 1691-1698*
- Kopciwicz, P.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Koppal, S.J.**, see Henderson, K., *TNS May 2020 840-857*
- Korjik, M.**, see Orsich, P., *TNS June 2020 952-955*
- Korkian, G.**, see Franco, F.J., *TNS July 2020 1547-1554*
- Korkian, G.**, see Fabero, J.C., *TNS July 2020 1461-1469*
- Korkian, G.**, Fabero, J.C., Hubert, G., Rezaei, M., Mecha, H., Franco, F.J., Puchner, H., and Clemente, J.A., Experimental and Analytical Study of the Responses of Nanoscale Devices to Neutrons Impinging at Various Incident Angles; *TNS Nov. 2020 2345-2352*
- Korzhih, M.**, see Yoshikawa, A., *TNS June 2020 875*
- Koschan, M.**, see Wang, S., *TNS June 2020 876-879*
- Kostiuk, I.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Kothan, S.**, see Aryal, P., *TNS June 2020 922-926*
- Kou, H.**, see Liu, Z., *TNS Aug. 2020 1904-1911*
- Kouzes, R.**, see Dalla Betta, G., *TNS April 2020 543*
- Kozub, J.A.**, see Ryder, L.D., *TNS Jan. 2020 38-43*
- Kozub, J.A.**, see Ryder, K.L., *TNS Jan. 2020 57-62*
- Kral, R.**, see Kodama, S., *TNS June 2020 1055-1062*
- Kramberger, G.**, see Rafi, J.M., *TNS Dec. 2020 2481-2489*
- Kremastiotis, I.**, Ballabriga, R., Campbell, M., Dannheim, D., Dort, K., Egidio, N., Kroger, J., Linssen, L., Llopart, X., Munker, M., Nurnberg, A., Peric, I., Spannagel, S., Vanat, T., and Williams, M., Design and Characterization of the CLICTD Pixelated Monolithic Sensor Chip; *TNS Oct. 2020 2263-2272*
- Krings, T.**, see Tartoni, N., *TNS Aug. 2020 1952-1961*
- Kroger, J.**, see Kremastiotis, I., *TNS Oct. 2020 2263-2272*
- Krucken, R.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Kucera, M.**, Rathaiah, M., Beitelrova, A., Kucerkova, R., and Nikl, M., Scintillation Properties and Energy Transfer in $(\text{GdY})\text{AlO}_3:\text{Ce}^{3+}$ Perovskites With High Gd Content; *TNS June 2020 1049-1054*
- Kucerkova, R.**, see Kucera, M., *TNS June 2020 1049-1054*
- Kuchenkova, A.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Kuczewski, A.**, see Vernon, E., *TNS April 2020 752-759*
- Kuczewski, J.**, see Vernon, E., *TNS April 2020 752-759*
- Kugathasan, T.**, see Habib, A., *TNS Feb. 2020 455-463*
- Kulsartov, T.V.**, see Kashaykin, P.F., *TNS Oct. 2020 2162-2171*
- Kumar, G.A.**, see Kalyani, ., *TNS Nov. 2020 2415-2420*
- Kumar, K.S.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Kumar, S.**, see Pande, N., *TNS Jan. 2020 116-125*
- Kumar, S.**, Herzkamp, M., Degenhardt, C., Seemann, J., Vezhlev, E., and van Waasen, S., Performance of a Position-Sensitive Neutron Scintillation Detector Based on Silicon Photomultipliers; *TNS June 2020 1169-1174*
- Kumari, P.**, Huang, S., Wasiolek, M., Hattar, K., and Ray, B., Layer-Dependent Bit Error Variation in 3-D NAND Flash Under Ionizing Radiation; *TNS Sept. 2020 2021-2027*
- Kuroda, J.**, Manabe, S., Watanabe, Y., Ito, K., Liao, W., Hashimoto, M., Abe, S., Harada, M., Oikawa, K., and Miyake, Y., Measurement of Single-Event Upsets in 65-nm SRAMs Under Irradiation of Spallation Neutrons at J-PARC MLF; *TNS July 2020 1599-1605*
- Kurosawa, S.**, see Chewpraditkul, W., *TNS June 2020 910-914*
- Kurosawa, S.**, see Chewpraditkul, W., *TNS June 2020 904-909*
- Kurosawa, S.**, see Yoshikawa, A., *TNS June 2020 875*
- Kurosawa, S.**, see Kodama, S., *TNS June 2020 1055-1062*
- Kurosawa, S.**, see Ueno, M., *TNS June 2020 1045-1048*
- Kurosawa, S.**, see Yoshino, M., *TNS June 2020 999-1002*
- Kurosawa, S.**, Yoshikawa, A., Gorbenko, V., Zorenko, T., Witkiewicz-Lukaszek, S., Fedorov, A., and Zorenko, Y., Composite Scintillators Based on the Films and Crystals of $(\text{Lu,Gd,La})_2\text{Si}_2\text{O}_7$ Pyrosilicates; *TNS June 2020 994-998*
- Kurosawa, S.**, see Ichimura, K., *TNS June 2020 894-897*
- Kurosawa, S.**, see Yamaji, A., *TNS June 2020 1027-1031*
- Kurosawa, S.**, see Sakthong, O., *TNS Oct. 2020 2295-2299*
- Kusano, M.**, see Kobayashi, D., *TNS Jan. 2020 328-335*
- Kuzmin, A.**, see Lee, I.S., *TNS Sept. 2020 2143-2147*
- Kuznetsov, A.G.**, see Sotskov, D.I., *TNS Nov. 2020 2396-2404*
- Kwon, I.**, see Jeon, H., *TNS July 2020 1738-1745*
- Kyrtzidis, D.**, see Dai, H.T., *TNS June 2020 956-961*

L

- Lablonde, L.**, see Morana, A., *TNS Jan. 2020 284-288*
- Lablonde, L.**, see Morana, A., *TNS July 2020 1637-1642*
- Lad, M.**, see Jain, A., *TNS Nov. 2020 2303-2310*
- Ladaci, A.**, see Aubry, M., *TNS Jan. 2020 278-283*
- Ladbury, R.**, Risk Methodology for SEE Caused by Proton- Induced Fission of High-Z Materials in Microelectronic Packaging; *TNS June 2020 1152-1160*
- Lagutere, T.**, see Riffaud, J., *TNS Oct. 2020 2172-2178*
- Lallement, G.**, see Abouzeid, F., *TNS July 2020 1326-1331*
- LaLumondiere, S.D.**, see Nergui, D., *TNS Jan. 2020 91-98*
- LaLumondiere, S.D.**, see Hales, J.M., *TNS Jan. 2020 81-90*

- Lamb, I.P.**, see Goncalves, M.M., *TNS July 2020 1573-1580*
- Lamberbourg, P.**, see de Bibikoff, A., *TNS Oct. 2020 2179-2187*
- Lamirand, V.**, see Vitullo, F., *TNS April 2020 625-635*
- Lan, Y.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Lance, M.J.**, see Rose, P.B., *TNS July 2020 1765-1771*
- Lancry, M.**, see Morana, A., *TNS July 2020 1637-1642*
- Laneve, D.**, Portosi, V., Falconi, M.C., Rutigliani, G., Prisco, R.A., Dimicoli, V., and Prudenzeno, F., Design of Electromagnetic Bandgap Cavities for High-Gradient On-Axis Coupled-Cavity Linear Accelerators; *TNS May 2020 768-776*
- Lanford, W.A.**, see Nelson, G.T., *TNS Sept. 2020 2051-2061*
- Lapington, J.S.**, see Williams, J.O.D., *TNS Sept. 2020 1987-1992*
- Laplace, T.A.**, see Manfredi, J.J., *TNS Feb. 2020 434-442*
- Lariviere, D.**, see Whittaker, C., *TNS June 2020 1040-1044*
- Larson, A.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Latham, T.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Lauenstein, J.**, see Johnson, R.A., *TNS Jan. 2020 135-139*
- Lauenstein, J.**, see Ball, D.R., *TNS Jan. 2020 22-28*
- Lauenstein, J.**, see Smith, J.A., *TNS May 2020 797-804*
- Laurent, A.**, see Aubry, M., *TNS Jan. 2020 278-283*
- Lavelle, C.M.**, Raimi-Zlatic, D., Kalter, J., Chiang, C., Haard, T., and Fisher, B., Sensitivity of Silicon Photomultipliers to Direct Gamma Ray Irradiation; *TNS Jan. 2020 389-399*
- Le Roch, A.**, see Goiffon, V., *TNS Jan. 2020 234-244*
- Le Roch, A.**, Virmontois, C., Paillet, P., Warner, J.H., Belloir, J., Magnan, P., and Goiffon, V., Comparison of X-Ray and Electron Radiation Effects on Dark Current Non-Uniformity and Fluctuations in CMOS Image Sensors; *TNS Jan. 2020 268-277*
- Le Roch, A.**, Virmontois, C., Paillet, P., Belloir, J., Rizzolo, S., Marcelot, O., Dewitte, H., Van Uffelen, M., Casellas, L.M., Magnan, P., and Goiffon, V., Phosphorus Versus Arsenic: Role of the Photodiode Doping Element in CMOS Image Sensor Radiation-Induced Dark Current and Random Telegraph Signal; *TNS July 2020 1241-1250*
- Le Roch, A.**, see Rizzolo, S., *TNS July 2020 1256-1262*
- Le Roch, A.**, see Dewitte, H., *TNS July 2020 1284-1292*
- Le Tutour, P.**, see Cheymol, G., *TNS April 2020 669-678*
- Le Tutour, P.**, see Cheymol, G., *TNS June 2020 1195*
- Leach, K.G.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Lechner, A.**, see Bilko, K., *TNS July 2020 1682-1690*
- Ledvina, V.**, see Popovich, K., *TNS June 2020 962-968*
- Lee, E.S.**, see Woo, J., *TNS April 2020 740-745*
- Lee, H.**, Lee, T., and Lee, W., Development of a Position-Sensitive 4π Compton Camera Based on a Single Segmented Scintillator; *TNS Dec. 2020 2511-2522*
- Lee, I.S.**, Kim, S.H., Kim, C.H., Cho, H.E., Kim, Y.J., Ahn, J.K., Jang, E.J., Choi, S., Iwasaki, Y., Kuzmin, A., Unno, Y., and Cheon, B.G., Progress on the Electromagnetic Calorimeter Trigger Simulation at the Belle II Experiment; *TNS Sept. 2020 2143-2147*
- Lee, J.**, see Jung, S., *TNS Nov. 2020 2311-2320*
- Lee, J.H.**, see Woo, J., *TNS April 2020 740-745*
- Lee, K.**, and Park, B., Estimation of Residual Radioactivity and Radiation Damage in SiC After Neutron Irradiation; *TNS July 2020 1374-1380*
- Lee, M.H.**, see Pandey, I.R., *TNS June 2020 915-921*
- Lee, T.**, see Lee, H., *TNS Dec. 2020 2511-2522*
- Lee, W.**, see Jo, A., *TNS Dec. 2020 2523-2534*
- Lee, W.**, see Lee, H., *TNS Dec. 2020 2511-2522*
- Leflat, A.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Lei, Z.**, see Yue, S., *TNS July 2020 1339-1344*
- Lemos Cid, E.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Lenahan, P.M.**, see Moxim, S.J., *TNS Jan. 2020 228-233*
- Lenahan, P.M.**, see Harmon, N.J., *TNS July 2020 1669-1673*
- Leonardo, B.G.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Leonard, D.S.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Lerch, M.**, see James, B., *TNS Jan. 2020 146-153*
- Lerch, M.L.F.**, see Peracchi, S., *TNS Jan. 2020 169-174*
- Lerch, M.L.F.**, see Biasi, G., *TNS March 2020 534-540*
- Lerch, M.L.F.**, see Kok, A., *TNS Dec. 2020 2490-2500*
- Lerner, G.**, see Kastriotou, M., *TNS Jan. 2020 63-70*
- Lerner, G.**, see Alia, R.G., *TNS Jan. 2020 345-352*
- Lerner, G.**, see Bilko, K., *TNS July 2020 1682-1690*
- Lerner, G.**, see Cecchetto, M., *TNS July 2020 1412-1420*
- Leroux, P.**, see Aguiar, Y.Q., *TNS July 2020 1581-1589*
- Letiche, M.**, see Possamai Bastos, R., *TNS July 2020 1404-1411*
- Li, B.**, see Wang, L., *TNS July 2020 1360-1364*
- Li, B.**, see Wang, L., *TNS July 2020 1360-1364*
- Li, B.**, see Wang, L., *TNS July 2020 1345-1350*
- Li, B.**, see Wang, L., *TNS July 2020 1345-1350*
- Li, B.**, see Lu, B., *TNS June 2020 1175-1184*
- Li, C.**, see Zhang, J., *TNS July 2020 1691-1698*
- Li, D.**, see Cai, C., *TNS Jan. 2020 374-381*
- Li, D.**, see Zhang, J., *TNS July 2020 1691-1698*
- Li, D.**, see Deptuch, G., *TNS Sept. 2020 2111-2118*
- Li, G.**, see Ren, Z., *TNS July 2020 1320-1325*
- Li, G.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Li, J.**, see Chen, G., *TNS Jan. 2020 369-373*
- Li, J.**, see Li, L., *TNS March 2020 508-517*
- Li, L.**, see Zhu, G., *TNS July 2020 1702-1709*
- Li, L.**, Li, Z., Ren, M., Li, J., Yang, G., Chen, X., Liu, X., Jian, Y., and Shi, J., Experimental Study on Displacement Damage Effects of Anode-Short MOS-Controlled Thyristor; *TNS March 2020 508-517*
- Li, L.**, Chen, X., Jian, Y., Li, Z., Wu, Y., Zhang, J., Ren, M., Zhang, B., Wu, X., Pang, Y., and Yang, G., Improved Model for Ionization-Induced Surface Recombination Current in p-n-p BJTs; *TNS Aug. 2020 1826-1834*
- Li, L.**, Li, Z., Chen, X., Wu, Y., Zhang, J., Ren, M., Zhang, B., Pang, Y., and Wu, X., A Study on Ionization Damage Effects of Anode-Short MOS-Controlled Thyristor; *TNS Sept. 2020 2062-2072*
- Li, M.**, see Ren, Z., *TNS July 2020 1320-1325*
- Li, Q.**, see Hu, Y., *TNS Aug. 2020 1899-1903*
- Li, S.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Li, X.**, see Wang, L., *TNS July 2020 1360-1364*
- Li, X.**, see Wang, L., *TNS July 2020 1345-1350*
- Li, X.**, see Dong, L., *TNS Sept. 2020 2003-2008*
- Li, Y.**, see Wang, X., *TNS May 2020 791-796*
- Li, Y.**, see Cai, Y., *TNS Aug. 2020 1861-1868*
- Li, Y.**, Cheng, Z., Yang, C., Wei, M., and Wen, J., Application of Binocular Stereo Vision in Radioactive Source Image Reconstruction and Multimodal Imaging Fusion; *TNS Nov. 2020 2454-2462*
- Li, Y.**, Wang, J., Zuo, Y., Zhu, J., and Fan, R., Simulation of High-Altitude Nuclear Electromagnetic Pulse Using a Modified Model of Scattered Gamma; *TNS Dec. 2020 2474-2480*
- Li, Z.**, see Li, L., *TNS March 2020 508-517*
- Li, Z.**, see Li, L., *TNS Aug. 2020 1826-1834*
- Li, Z.**, see Wang, R., *TNS Sept. 2020 2009-2014*
- Li, Z.**, see Li, L., *TNS Sept. 2020 2062-2072*
- Li, Z.**, see Chen, J., *TNS Nov. 2020 2353-2362*
- Li, Z.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Li Vecchi, G.**, see Di Francesca, D., *TNS Jan. 2020 140-145*
- Liang, C.**, see Gorchichko, M., *TNS Jan. 2020 245-252*
- Liang, F.**, and Smith, J., Characterization of CLLBC Coupled to Silicon Photomultipliers; *TNS June 2020 927-932*
- Liang, F.**, see Sun, L., *TNS Sept. 2020 2148-2154*
- Liang, T.**, see Wang, H., *TNS May 2020 805-810*
- Liao, S.**, see Sun, L., *TNS Sept. 2020 2148-2154*
- Liao, W.**, see Mahara, T., *TNS July 2020 1555-1559*
- Liao, W.**, see Kuroda, J., *TNS July 2020 1599-1605*
- Liao, W.**, Hashimoto, M., Manabe, S., Watanabe, Y., Abe, S., Tampo, M., Takeshita, S., and Miyake, Y., Impact of the Angle of Incidence on Negative Muon-Induced SEU Cross Sections of 65-nm Bulk and FDSOI SRAMs; *TNS July 2020 1566-1572*
- Libano, F.**, Wilson, B., Wirthlin, M., Rech, P., and Brunhaver, J., Understanding the Impact of Quantization, Accuracy, and Radiation on the Reliability of Convolutional Neural Networks on FPGAs; *TNS July 2020 1478-1484*
- Licciardi, C.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Lijun, Z.**, see Wengang, S., *TNS July 2020 1710-1714*

- Limousin, O.**, see Daniel, G., *TNS April 2020 644-653*
- Lin, J.**, see Sun, L., *TNS Sept. 2020 2148-2154*
- Lin, X.**, see Wang, X., *TNS May 2020 791-796*
- Lindoso, A.**, see Pena-Fernandez, M., *TNS Jan. 2020 126-134*
- Lindoso, A.**, see Pena-Fernandez, M., *TNS July 2020 1452-1460*
- Lindsay, C.**, see Belanger-Champagne, C., *TNS Jan. 2020 161-168*
- Linssen, L.**, see Kremastiotis, I., *TNS Oct. 2020 2263-2272*
- Linten, D.**, see Ryder, L.D., *TNS Jan. 2020 38-43*
- Linten, D.**, see Zhao, S.E., *TNS Jan. 2020 253-259*
- Linten, D.**, see Gorchichko, M., *TNS Jan. 2020 245-252*
- Linten, D.**, see Bonaldo, S., *TNS Jan. 2020 210-220*
- Linten, D.**, see Bonaldo, S., *TNS July 2020 1312-1319*
- Lipovetzky, J.**, see Carbonetto, S., *TNS June 2020 1118-1124*
- Lipovetzky, J.**, see Alcalde Bessia, F., *TNS Oct. 2020 2217-2223*
- Lisowski, P.W.**, see Auden, E.C., *TNS Jan. 2020 29-37*
- Liu, B.**, see He, N., *TNS Jan. 2020 400-404*
- Liu, B.**, see Cai, Y., *TNS Aug. 2020 1861-1868*
- Liu, B.**, see Hu, Y., *TNS Aug. 2020 1899-1903*
- Liu, C.**, see Shu, L., *TNS July 2020 1390-1394*
- Liu, C.**, see Wei, Y., *TNS June 2020 939-945*
- Liu, C.**, see Shu, L., *TNS June 2020 1133-1138*
- Liu, C.**, see Bi, D., *TNS Nov. 2020 2337-2344*
- Liu, C.M.**, see Dai, H.T., *TNS June 2020 956-961*
- Liu, F.**, Deng, Z., and Liu, Y., Cryogenic Bandgap Reference Circuit With Compact Model Parameter Extraction of MOSFETs and BJTs for HPGc Detectors; *TNS Oct. 2020 2209-2216*
- Liu, H.**, see Lu, B., *TNS June 2020 1175-1184*
- Liu, J.**, see He, N., *TNS Jan. 2020 400-404*
- Liu, J.**, see Cai, C., *TNS Jan. 2020 374-381*
- Liu, J.**, see Zhu, G., *TNS July 2020 1702-1709*
- Liu, M.**, see Wang, L., *TNS July 2020 1360-1364*
- Liu, M.**, see Wang, L., *TNS July 2020 1345-1350*
- Liu, N.**, see Wang, L., *TNS July 2020 1360-1364*
- Liu, N.**, see Wang, L., *TNS July 2020 1360-1364*
- Liu, N.**, see Wang, L., *TNS July 2020 1345-1350*
- Liu, N.**, see Wang, L., *TNS July 2020 1345-1350*
- Liu, S.**, see Fan, Y., *TNS Oct. 2020 2246-2254*
- Liu, T.**, see Cai, C., *TNS Jan. 2020 374-381*
- Liu, T.**, see Deptuch, G., *TNS Sept. 2020 2111-2118*
- Liu, X.**, see Wei, Q., *TNS Feb. 2020 450-454*
- Liu, X.**, see Wang, H., *TNS May 2020 805-810*
- Liu, X.**, see Henderson, K., *TNS May 2020 840-857*
- Liu, X.**, see Wang, X., *TNS May 2020 791-796*
- Liu, X.**, see Wang, L., *TNS July 2020 1360-1364*
- Liu, X.**, see Wang, L., *TNS July 2020 1345-1350*
- Liu, X.**, see Li, L., *TNS March 2020 508-517*
- Liu, X.**, see Hu, Y., *TNS Aug. 2020 1899-1903*
- Liu, Y.**, see Wei, Q., *TNS Feb. 2020 450-454*
- Liu, Y.**, see Liu, F., *TNS Oct. 2020 2209-2216*
- Liu, Z.**, Tao, J., Zhao, J., Kou, H., Cao, P., Song, J., Gong, W., Itoh, R., Yamada, S., and Zhou, Q., A DAQ Upgrade Solution for Belle II Experiment; *TNS Aug. 2020 1904-1911*
- Llopert, X.**, see Kremastiotis, I., *TNS Oct. 2020 2263-2272*
- Logan, J.V.**, Short, M.P., Webster, P.T., and Morath, C.P., Orbital Equivalence of Terrestrial Radiation Tolerance Experiments; *TNS Nov. 2020 2382-2391*
- Loridon, J.**, see Ben Mosbah, M., *TNS April 2020 662-668*
- Lourenco, N.E.**, see Nergui, D., *TNS Jan. 2020 91-98*
- Lourenco, N.E.**, see Ildefonso, A., *TNS July 2020 1521-1529*
- Loveless, T.D.**, Patel, B., Reising, D.R., Roca, R., Allen, M., Massengill, L.W., and McMorrow, D., Ionizing Radiation Effects Spectroscopy for Analysis of Single-Event Transients; *TNS Jan. 2020 99-107*
- Loveless, T.D.**, see Richards, E.W., *TNS June 2020 1144-1151*
- Lowell, R.A.**, see Nelson, G.T., *TNS Sept. 2020 2051-2061*
- Lu, B.**, Li, B., Huo, J., Chen, Y., Zhao, W., Gao, J., Wang, C., Liu, H., Luo, J., and Zhou, Y., Design and Characterizations of the Radiation-Hardened XCR4C ASIC for X-Ray CCDs for Space Astronomical Applications; *TNS June 2020 1175-1184*
- Lucsanyi, D.**, Prod'homme, T., Simulating Charge Deposition by Cosmic Rays Inside Astronomical Imaging Detectors; *TNS July 2020 1623-1628*
- Ludwig, F.**, see Sikora, D., *TNS Sept. 2020 2136-2142*
- Luley, J.**, see Cerba, S., *TNS April 2020 636-643*
- Luo, C.N.**, see Dai, H.T., *TNS June 2020 956-961*
- Luo, G.**, see Wei, Q., *TNS Feb. 2020 450-454*
- Luo, H.**, see Wang, X., *TNS May 2020 791-796*
- Luo, J.**, see Wang, L., *TNS July 2020 1360-1364*
- Luo, J.**, see Wang, L., *TNS July 2020 1345-1350*
- Luo, J.**, see Lu, B., *TNS June 2020 1175-1184*
- Luo, Y.**, see Wang, X., *TNS July 2020 1443-1451*
- Luoni, F.**, see Sterpone, L., *TNS Sept. 2020 2034-2041*
- Lusiani, A.**, see Mastroianni, S., *TNS May 2020 832-839*
- Lv, G.**, see Dong, L., *TNS Sept. 2020 2003-2008*
- Lv, P.**, Cao, G.F., Wen, L.J., Kharusi, S.A., Anton, G., Arnquist, I.J., Badhrees, I., Barbeau, P.S., Beck, D., Belov, V., Bhatta, T., Breur, P.A., Brodsky, J.P., Brown, E., Brunner, T., Mamahit, S.B., Caden, E., Cao, L., Chambers, C., Chana, B., Charlebois, S.A., Chiu, M., Cleveland, B., Coon, M., Craycraft, A., Dalmasson, J., Daniels, T., Darroch, L., St. Croix, A.D., Mesrobian-Kabakian, A.D., Deslandes, K., DeVoe, R., Vacri, M.L.D., Dilling, J., Ding, Y.Y., Dolinski, M.J., Doria, L., Dragone, A., Echevers, J., Edaltagi, F., Elbeltagi, M., Fabris, L., Fairbank, D., Fairbank, W., Farine, J., Ferrara, S., Feyzbakhsh, S., Fucarino, A., Gallina, G., Gautam, P., Giacomini, G., Goeldi, D., Gornea, R., Gratta, G., Hansen, E.V., Heffner, M., Hoppe, E.W., Hobl, J., House, A., Hughes, M., Iverson, A., Jamil, A., Jewell, M.J., Jiang, X.S., Karelin, A., Kaufman, L.J., Koffas, T., Krucken, R., Kuchenkov, A., Kumar, K.S., Lan, Y., Larson, A., Leach, K.G., Lenardo, B.G., Leonard, D.S., Li, G., Li, S., Li, Z., Licciardi, C., MacLellan, R., Massacret, N., McElroy, T., Medina-Peregrina, M., Michel, T., Mong, B., Moore, D.C., Murray, K., Nakarmi, P., Natzke, C.R., Newby, R.J., Ning, Z., Njoya, O., Nolet, F., Nusair, O., Odgers, K., Odian, A., Oriunno, M., Orrell, J.L., Ortega, G.S., Ostrovskiy, I., Overman, C.T., Parent, S., Piepke, A., Pocar, A., Pratte, J.-., Radeka, V., Raguzin, E., Rescia, S., Retiere, F., Richman, M., Robinson, A., Rossignol, T., Rowson, P.C., Roy, N., Runge, J., Saldanha, R., Sangiorgio, S., Skarpaas, K., Soma, A.K., St-Hilaire, G., Stekhanov, V., Stiegler, T., Sun, X.L., Tarka, M., Todd, J., Totev, T.I., Tsang, R., Tsang, T., Vachon, F., Veer-araghavan, V., Viel, S., Visser, G., Vivo-Vilches, C., Vuilleumier, J., Wagenpfeil, M., Wager, T., Walent, M., Wang, Q., Watkins, J., Wei, W., Wichoski, U., Wu, S.X., Wu, W.H., Wu, X., Xia, Q., Yang, H., Yang, L., Zeldovich, O., Zhao, J., Zhou, Y., and Ziegler, T., Reflectance of Silicon Photomultipliers at Vacuum Ultraviolet Wavelengths; *TNS Dec. 2020 2501-2510*
- Lynde, C.**, Montbarbon, E., Hamel, M., Grabowski, A., Frangville, C., Bertrand, G.H.V., Galli, G., Carrel, F., Schoepff, V., and El Bitar, Z., Optimization of the Charge Comparison Method for Multiradiation Field Using Various Measurement Systems; *TNS April 2020 679-687*
- Lyoussi, A.**, see Derraji, K., *TNS April 2020 568-574*
- Lyoussi, A.**, see Dalla Betta, G., *TNS April 2020 543*
- Lyoussi, A.**, see Obratzsova, O., *TNS May 2020 863-871*
- Lyoussi, A.**, see Volte, A., *TNS Nov. 2020 2405-2414*

M

- by Fiber-Coupled Raman Spectrometry for H₂-Risk Management in Nuclear Containment During a Severe Nuclear Accident; *TNS April 2020 617-624*
- Mahara, T.**, Manabe, S., Watanabe, Y., Liao, W., Hashimoto, M., Saito, T.Y., Niikura, M., Ninomiya, K., Tomono, D., and Sato, A., Irradiation Test of 65-nm Bulk SRAMs With DC Muon Beam at RCNP-MuSIC Facility; *TNS July 2020 1555-1559*
- Maier, D.**, see Daniel, G., *TNS April 2020 644-653*
- Maisonny, R.**, see Ribiere, M., *TNS July 2020 1722-1731*
- Majewski, M.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Majkrzak, C.F.**, see Pritchard, K., *TNS Jan. 2020 414-421*
- Makino, T.**, see Kobayashi, D., *TNS Jan. 2020 328-335*
- Makonyi, K.**, see Preston, M., *TNS June 2020 1093-1106*
- Malherbe, V.**, see Abouzeid, F., *TNS July 2020 1326-1331*
- Maliszewskyj, N.C.**, see Pritchard, K., *TNS Jan. 2020 414-421*
- Mamahit, S.B.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Manabe, S.**, see Mahara, T., *TNS July 2020 1555-1559*
- Manabe, S.**, see Kuroda, J., *TNS July 2020 1599-1605*
- Manabe, S.**, see Liao, W., *TNS July 2020 1566-1572*
- Mandal, K.C.**, see Sajjad, M., *TNS Aug. 2020 1946-1951*
- Mandjavidze, I.**, see Azmoun, B., *TNS Aug. 2020 1869-1876*
- Manfredi, J.J.**, Goldblum, B.L., Laplace, T.A., Gabella, G., Gordon, J., O'Brien, A., Chowdhury, S., Brown, J.A., and Brubaker, E., Proton Light Yield of Fast Plastic Scintillators for Neutron Imaging; *TNS Feb. 2020 434-442*
- Marcandella, C.**, see Girard, S., *TNS Jan. 2020 289-295*
- Marcandella, C.**, see Riffaud, J., *TNS Oct. 2020 2172-2178*
- Marcelot, O.**, see Le Roch, A., *TNS July 2020 1241-1250*
- Marcelot, O.**, see Rizzolo, S., *TNS July 2020 1256-1262*
- Marchais, T.**, Perot, B., Carasco, C., Ma, J., Allinei, P., Toubon, H., Goupillou, R., and Collot, J., Characterization of Uranium Ore Samples by HPGe Gamma-Ray Spectroscopy; *TNS April 2020 654-661*
- Marciniewski, P.**, see Preston, M., *TNS June 2020 1093-1106*
- Marcus, E.**, see Vax, E., *TNS April 2020 544-551*
- Marignetti, F.**, see Mastroianni, S., *TNS May 2020 832-839*
- Marin, E.**, see Morana, A., *TNS Jan. 2020 305-311*
- Marin, E.**, see Girard, S., *TNS Jan. 2020 289-295*
- Marin, E.**, see Morana, A., *TNS Jan. 2020 284-288*
- Marin, E.**, see Aubry, M., *TNS Jan. 2020 278-283*
- Marin, E.**, see Morana, A., *TNS July 2020 1637-1642*
- Marin, E.**, see Campanella, C., *TNS July 2020 1643-1649*
- Marinho, F.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Marrocchesi, P.S.**, see Ratti, L., *TNS July 2020 1293-1301*
- Marshall, M.S.J.**, Kenesei, P., Marton, Z., Sosa, C., Brecher, C., Wart, M., Miller, S., Singh, B., Miceli, A., and Nagarkar, V.V., Advances in High-Resolution Ultrafast Lu₃:Ce Scintillators for Fast Timing Applications; *TNS June 2020 969-973*
- Marshall, M.S.J.**, see Miller, S.R., *TNS Aug. 2020 1929-1933*
- Martazov, E.S.**, see Fedorov, V.A., *TNS April 2020 688-693*
- Martin, A.**, see Henderson, K., *TNS May 2020 840-857*
- Martin-Holgado, P.**, see Alia, R.G., *TNS Jan. 2020 345-352*
- Martin-Holgado, P.**, see Rezaei, M., *TNS Oct. 2020 2188-2195*
- Martinazzoli, L.**, Crystal Fibers for the LHCb Calorimeter Upgrade; *TNS June 2020 1003-1008*
- Martinella, C.**, Ziemann, T., Stark, R., Tsbizov, A., Voss, K.O., Alia, R.G., Kadi, Y., Grossner, U., and Javanainen, A., Heavy-Ion Microbeam Studies of Single-Event Leakage Current Mechanism in SiC VD-MOSFETs; *TNS July 2020 1381-1389*
- Martinez, M.**, see Riffaud, J., *TNS Oct. 2020 2172-2178*
- Martinez-Alvarez, A.**, see Serrano-Cases, A., *TNS July 2020 1511-1520*
- Martinez-Sierra, L.M.**, see Jun, B., *TNS July 2020 1629-1636*
- Martini, M.**, see Atanov, N., *TNS June 2020 978-982*
- Marton, Z.**, see Marshall, M.S.J., *TNS June 2020 969-973*
- Masi, A.**, see Gnemmi, G., *TNS July 2020 1614-1622*
- Masi, A.**, see Ferraro, R., *TNS July 2020 1395-1403*
- Maskrot, H.**, see Cheymol, G., *TNS April 2020 669-678*
- Maskrot, H.**, see Cheymol, G., *TNS April 2020 552-558*
- Maskrot, H.**, see Cheymol, G., *TNS June 2020 1195*
- Massacret, N.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Massengill, L.W.**, see Loveless, T.D., *TNS Jan. 2020 99-107*
- Massengill, L.W.**, see Richards, E.W., *TNS June 2020 1144-1151*
- Mastroianni, S.**, Anastasio, A., Bedeschi, F., Boiano, A., Cantatore, G., Cauz, D., Corradi, G., Dabagov, S., Di Meo, P., Driutti, A., Di Sciascio, G., Di Stefano, R., Ferrari, C., Fioretti, A., Gabbanini, C., Gioiosa, A., Hampai, D., Iacovacci, M., Incagli, M., Karuza, M., Lusiani, A., Marignetti, F., Nath, A., Pauletta, G., Piacentino, G.M., Santi, L., and Venanzoni, G., Design and Performance of Data Acquisition and Control System for the Muon g-2 Laser Calibration; *TNS May 2020 832-839*
- Matsufuji, N.**, see Peracchi, S., *TNS Jan. 2020 169-174*
- Matsufuji, N.**, see James, B., *TNS Jan. 2020 146-153*
- Matsuura, D.**, see Kobayashi, D., *TNS Jan. 2020 328-335*
- Matsuyama, H.**, see Kato, T., *TNS July 2020 1485-1493*
- Mattiazzo, S.**, see Bonaldo, S., *TNS July 2020 1302-1311*
- Maurin, L.**, see Cheymol, G., *TNS April 2020 669-678*
- Maurin, L.**, see Cheymol, G., *TNS June 2020 1195*
- Mazor, T.**, see Vax, E., *TNS April 2020 544-551*
- McCurdy, M.W.**, see Brewer, R.M., *TNS Jan. 2020 108-115*
- McElroy, T.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- McMillan, S.R.**, see Harmon, N.J., *TNS July 2020 1669-1673*
- McMorrow, D.**, see Tzintzarov, G.N., *TNS Jan. 2020 260-267*
- McMorrow, D.**, see Loveless, T.D., *TNS Jan. 2020 99-107*
- McMorrow, D.**, see Ildefonso, A., *TNS Jan. 2020 71-80*
- McMorrow, D.**, see Hales, J.M., *TNS Jan. 2020 81-90*
- McMorrow, D.**, see Ildefonso, A., *TNS July 2020 1521-1529*
- McMorrow, D.P.**, see Ryder, K.L., *TNS Jan. 2020 57-62*
- Mead, J.**, see Vernon, E., *TNS April 2020 752-759*
- Mecha, H.**, see Franco, F.J., *TNS July 2020 1547-1554*
- Mecha, H.**, see Fabero, J.C., *TNS July 2020 1461-1469*
- Mecha, H.**, see Rezaei, M., *TNS Oct. 2020 2188-2195*
- Mecha, H.**, see Korkian, G., *TNS Nov. 2020 2345-2352*
- Medina, N.H.**, see de Oliveira, A.B., *TNS July 2020 1503-1510*
- Medina, N.H.**, see Gonzalez, C.J., *TNS March 2020 518-524*
- Medina-Peregrina, M.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Meehan, K.**, see Vavrek, J.R., *TNS Nov. 2020 2421-2430*
- Mei, B.**, see Wang, H., *TNS May 2020 805-810*
- Meijerink, A.**, see Wiczorek, H., *TNS Aug. 2020 1934-1945*
- Mekki, J.**, see Aubry, M., *TNS Jan. 2020 278-283*
- Mekki, J.**, see Ruffenach, M., *TNS July 2020 1351-1359*
- Melcher, C.L.**, see Wang, S., *TNS June 2020 876-879*
- Melin, G.**, see Morana, A., *TNS Jan. 2020 305-311*
- Mendes, E.**, Baron, S., Soos, C., Troska, J., and Novellini, P., Achieving Picosecond-Level Phase Stability in Timing Distribution Systems With Xilinx Ultrascale Transceivers; *TNS March 2020 473-481*
- Meng, C.**, see Xu, Z., *TNS Feb. 2020 425-433*
- Meng, J.**, see Zhu, G., *TNS July 2020 1702-1709*
- Meng, X.**, Stefanov, K.D., and Holland, A.D., Proton and Gamma Radiation Effects on a Fully Depleted Pinned Photodiode CMOS Image Sensor; *TNS June 2020 1107-1113*
- Meng, X.**, see Heymes, J., *TNS Aug. 2020 1962-1967*
- Merk, M.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Mescia, L.**, see Aubry, M., *TNS Jan. 2020 278-283*
- Mesick, K.E.**, see Watts, M.M., *TNS March 2020 525-533*
- Mesrobian-Kabakian, A.D.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Metelkin, I.O.**, see Sotskov, D.I., *TNS Nov. 2020 2396-2404*
- Meuris, A.**, see Daniel, G., *TNS April 2020 644-653*
- Meyer Garcia, L.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Mibe, T.**, see Kishishita, T., *TNS Sept. 2020 2089-2095*
- Miceli, A.**, see Vernon, E., *TNS April 2020 752-759*
- Miceli, A.**, see Marshall, M.S.J., *TNS June 2020 969-973*
- Michel, T.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Michez, A.**, see Niskanen, K., *TNS July 2020 1365-1373*
- Mihokova, E.**, see Popovich, K., *TNS June 2020 962-968*
- Mihokova, E.**, see Tomanova, K., *TNS June 2020 933-938*
- Miller, J.K.**, Gisolfi, N., and Dubrawski, A., Analysis of Source Detectability With Fast-Moving Sensors; *TNS Oct. 2020 2278-2285*

- Miller, K.**, Good, J.H., Fawaz, I., Howarth, D., and Dubrawski, A., Gamma-Ray Source Detection Under Occlusions and Position Errors in Cluttered Urban Scenes; *TNS June 2020 1185-1194*
- Miller, S.**, see Marshall, M.S.J., *TNS June 2020 969-973*
- Miller, S.**, see Bhattacharya, P., *TNS June 2020 1032-1034*
- Miller, S.R.**, Marshall, M.S.J., Wart, M., Crha, J., Trtik, P., and Nagarkar, V.V., High-Resolution Thermal Neutron Imaging With $^{10}\text{Boron/CsI:TI}$ Scintillator Screen; *TNS Aug. 2020 1929-1933*
- Mills, C.A.**, see Thirianne, H.M., *TNS Oct. 2020 2238-2245*
- Miscetti, S.**, see Atanov, N., *TNS June 2020 978-982*
- Mishra, A.K.**, Shimjith, S.R., and Tiwari, A.P., Simultaneous Estimation of Neutron Flux and Reactivity in Nuclear Reactors; *TNS Aug. 2020 1791-1802*
- Mitard, J.**, see Ryder, L.D., *TNS Jan. 2020 38-43*
- Mitsuya, Y.**, see Otaka, Y., *TNS June 2020 988-993*
- Miyake, Y.**, see Kuroda, J., *TNS July 2020 1599-1605*
- Miyake, Y.**, see Liao, W., *TNS July 2020 1566-1572*
- Miyashita, T.**, see Atanov, N., *TNS June 2020 978-982*
- Mocko, M.**, see Hu, C., *TNS June 2020 1086-1092*
- Molina, R.**, see Dewitte, H., *TNS July 2020 1284-1292*
- Moll, M.**, see Rafi, J.M., *TNS Dec. 2020 2481-2489*
- Monahan, D.M.**, see Nergui, D., *TNS Jan. 2020 91-98*
- Monahan, D.M.**, see Hales, J.M., *TNS Jan. 2020 81-90*
- Mong, B.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Monsanglant-Louvet, C.**, see Campanella, C., *TNS July 2020 1643-1649*
- Montbarbon, E.**, see Lynde, C., *TNS April 2020 679-687*
- Moody, L.**, see Heymes, J., *TNS Aug. 2020 1962-1967*
- Moore, D.C.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Moran, S.L.**, see Brewer, R.M., *TNS Jan. 2020 108-115*
- Morana, A.**, Girard, S., Marin, E., Vidalot, J., Cebollada, A., Melin, G., Champavere, A., Robin, T., Alessi, A., Boukenter, A., and Ouerdane, Y., Performances of Radiation-Hardened Single-Ended Raman Distributed Temperature Sensors Using Commercially Available Fibers; *TNS Jan. 2020 305-311*
- Morana, A.**, see Girard, S., *TNS Jan. 2020 289-295*
- Morana, A.**, Marin, E., Girard, S., Lablonde, L., Pinsard, E., Robin, T., Boukenter, A., and Ouerdane, Y., Radiation Response of Distributed Feed-back Bragg Gratings for Space Applications; *TNS Jan. 2020 284-288*
- Morana, A.**, see Aubry, M., *TNS Jan. 2020 278-283*
- Morana, A.**, Girard, S., Marin, E., Lablonde, L., Robin, T., Lancry, M., Boukenter, A., and Ouerdane, Y., Radiation-Response of Fiber Bragg Gratings at Low Temperatures; *TNS July 2020 1637-1642*
- Morana, A.**, see Campanella, C., *TNS July 2020 1643-1649*
- Morana, A.**, see Bahout, J., *TNS July 2020 1658-1662*
- Morana, A.**, see De Michele, V., *TNS July 2020 1650-1657*
- Morath, C.P.**, see Logan, J.V., *TNS Nov. 2020 2382-2391*
- Moreno, J.**, see Nuns, T., *TNS July 2020 1263-1272*
- Morescalchi, L.**, see Atanov, N., *TNS June 2020 978-982*
- Mori, Y.**, see Kobayashi, D., *TNS Jan. 2020 328-335*
- Morilla, Y.**, see Alia, R.G., *TNS Jan. 2020 345-352*
- Morilla, Y.**, see Serrano-Cases, A., *TNS July 2020 1511-1520*
- Morilla, Y.**, see Rezaei, M., *TNS Oct. 2020 2188-2195*
- Morishita, Y.**, see Kodama, S., *TNS June 2020 1055-1062*
- Morishita, Y.**, Izaki, K., Kaneko, J.H., Yamamoto, S., Higuchi, M., and Torii, T., Development of a $\text{Gd}_2\text{Si}_2\text{O}_7$ (GPS) Scintillator-Based Alpha Imaging Detector for Rapid Plutonium Detection in High-Radon Environments; *TNS Oct. 2020 2203-2208*
- Moritz, M.**, see Orsich, P., *TNS June 2020 952-955*
- Morris, A.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Morsani, F.**, see Ratti, L., *TNS July 2020 1293-1301*
- Mosbah, M.B.**, see Eleon, C., *TNS Sept. 2020 2096-2104*
- Moss, S.**, see Fleetwood, D., *TNS Jan. 2020 7*
- Moss, S.**, see Fleetwood, D., *TNS July 2020 1201*
- Mosset, J.**, see Vitullo, F., *TNS April 2020 625-635*
- Moszynski, M.**, see Chewpraditkul, W., *TNS June 2020 910-914*
- Moszynski, M.**, see Chewpraditkul, W., *TNS June 2020 904-909*
- Moszynski, M.**, see Sakthong, O., *TNS Oct. 2020 2295-2299*
- Motakef, S.**, see Hawrami, R., *TNS June 2020 1020-1026*
- Mousseau, N.**, see Jarrin, T., *TNS July 2020 1273-1283*
- Moxim, S.J.**, Ashton, J.P., Lenahan, P.M., Flatte, M.E., Harmon, N.J., and King, S.W., Observation of Radiation-Induced Leakage Current Defects in MOS Oxides With Multifrequency Electrically Detected Magnetic Resonance and Near-Zero-Field Magnetoresistance; *TNS Jan. 2020 228-233*
- Mucka, V.**, see Popovich, K., *TNS June 2020 962-968*
- Mukherjee, S.S.**, see Smith, J.A., *TNS May 2020 797-804*
- Muller, C.**, see Dewitte, H., *TNS July 2020 1284-1292*
- Munje, R.K.**, see Desai, R.J., *TNS June 2020 1076-1085*
- Munker, M.**, see Kremastiotis, I., *TNS Oct. 2020 2263-2272*
- Munteanu, D.**, see Aufran, J., *TNS July 2020 1428-1435*
- Murat, M.**, see Akkerman, A., *TNS Aug. 2020 1813-1825*
- Murat, P.**, see Atanov, N., *TNS June 2020 978-982*
- Murray, D.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Murray, K.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Muschitiello, M.**, see Bagatin, M., *TNS July 2020 1421-1427*
- Myasnikova, A.**, see Shendrik, R., *TNS June 2020 946-951*

N

- Nagarkar, V.V.**, see Marshall, M.S.J., *TNS June 2020 969-973*
- Nagarkar, V.V.**, see Bhattacharya, P., *TNS June 2020 1032-1034*
- Nagarkar, V.V.**, see Miller, S.R., *TNS Aug. 2020 1929-1933*
- Nagasawa, T.**, see Kishishita, T., *TNS Sept. 2020 2089-2095*
- Nagirnyi, V.**, see Saaring, J., *TNS June 2020 1009-1013*
- Naik, S.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Nakamura, K.D.**, see Nakamura, K.Z., *TNS July 2020 1772-1776*
- Nakamura, K.Z.**, Ban, S., Ichikawa, A.K., Ikeno, M., Nakamura, K.D., Nakaya, T., Obara, S., Tanaka, S., Uchida, T., and Yoshida, M., Front-End Electronics for the SiPM-Readout Gaseous TPC for Neutrinoless Double-Beta Decay Search; *TNS July 2020 1772-1776*
- Nakarmi, P.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Nakaya, T.**, see Nakamura, K.Z., *TNS July 2020 1772-1776*
- Nakhostin, M.**, see Taggart, M.P., *TNS April 2020 603-608*
- Nancarrow, M.**, see James, B., *TNS Jan. 2020 146-153*
- Napieralski, A.**, see Cichalewski, W., *TNS Sept. 2020 2119-2127*
- Narita, T.**, see Kobayashi, D., *TNS Jan. 2020 328-335*
- Nasteva, I.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Nath, A.**, see Mastroianni, S., *TNS May 2020 832-839*
- Natzke, C.R.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Neale, A.**, and Seifert, N., A Chip-Level Single-Event Latchup (SEL) Estimation Methodology; *TNS Jan. 2020 15-21*
- Necas, V.**, see Cerba, S., *TNS April 2020 636-643*
- Nechaev, D.**, see Atanov, N., *TNS July 2020 1760-1764*
- Nedelcu, A.**, see Nuns, T., *TNS July 2020 1263-1272*
- Negirneac, V.**, see Sampaio, J.M., *TNS Sept. 2020 2028-2033*
- Negut, V.**, see Vavrek, J.R., *TNS Nov. 2020 2421-2430*
- Nehr, S.**, see Magne, S., *TNS April 2020 617-624*
- Nelson, G.T.**, Ouin, G., Polly, S.J., Wynne, K.B., Haberl, A.W., Lanford, W.A., Lowell, R.A., and Hubbard, S.M., *In Situ* Deep-Level Transient Spectroscopy and Dark Current Measurements of Proton-Irradiated InGaAs Photodiodes; *TNS Sept. 2020 2051-2061*
- Nelson, R.**, see Hu, C., *TNS June 2020 1086-1092*
- Nergui, D.**, see Tzintzarov, G.N., *TNS Jan. 2020 260-267*
- Nergui, D.**, Ildefonso, A., Tzintzarov, G.N., Lourenco, N.E., Omprakash, A.P., Goley, P.S., Fleetwood, Z.E., LaLumondiere, S.D., Bonsall, J.P., Monahan, D.M., Kettering, H., Brewster, D.L., and Cressler, J.D., Single-Event Transients in SiGe HBTs Induced by Pulsed X-Ray Microbeam; *TNS Jan. 2020 91-98*
- Nergui, D.**, see Ildefonso, A., *TNS Jan. 2020 71-80*
- Nergui, D.**, see Hales, J.M., *TNS Jan. 2020 81-90*
- Neuzilova, B.**, see Popovich, K., *TNS June 2020 962-968*
- Newby, R.J.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Nguyen, L.**, see Ruffenach, M., *TNS July 2020 1351-1359*
- Nicholson, A.D.**, Peplow, D.E., Ghawaly, J.M., Willis, M.J., and Archer, D.E., Generation of Synthetic Data for a Radiation Detection Algorithm Competition; *TNS Aug. 2020 1968-1975*
- Nihei, T.**, see Ueno, M., *TNS June 2020 1045-1048*

Niikura, M., see Mahara, T., *TNS July 2020 1555-1559*
Nikl, M., see Chewpraditkul, W., *TNS June 2020 904-909*
Nikl, M., see Yoshikawa, A., *TNS June 2020 875*
Nikl, M., see Kodama, S., *TNS June 2020 1055-1062*
Nikl, M., see Ueno, M., *TNS June 2020 1045-1048*
Nikl, M., see Jary, V., *TNS June 2020 974-977*
Nikl, M., see Kucera, M., *TNS June 2020 1049-1054*
Nikl, M., see Sakthong, O., *TNS Oct. 2020 2295-2299*
Ning, Z., see Lv, P., *TNS Dec. 2020 2501-2510*
Ninomiya, K., see Mahara, T., *TNS July 2020 1555-1559*
Nisbet, A., see Thirimanne, H.M., *TNS Oct. 2020 2238-2245*
Niskanen, K., Touboul, A.D., Germanicus, R.C., Michez, A., Javanainen, A., Wrobel, F., Boch, J., Pouget, V., and Saigne, F., Impact of Electrical Stress and Neutron Irradiation on Reliability of Silicon Carbide Power MOSFET; *TNS July 2020 1365-1373*
Niu, P., see Xie, B., *TNS June 2020 1066-1075*
Njoya, O., see Lv, P., *TNS Dec. 2020 2501-2510*
Nolet, F., see Lv, P., *TNS Dec. 2020 2501-2510*
Nolibe, G., see Derraji, K., *TNS April 2020 568-574*
Norvez, O., see Magne, S., *TNS April 2020 617-624*
Novellini, P., see Mendes, E., *TNS March 2020 473-481*
Novotny, R., see Orsich, P., *TNS June 2020 952-955*
Nowlin, R.N., see Goley, P.S., *TNS Jan. 2020 296-304*
Nowlin, R.N., see Black, J.D., *TNS June 2020 1125-1132*
Nuns, T., Inguibert, C., Barbero, J., Moreno, J., Ducret, S., Nedelcu, A., Galnander, B., and Passoth, E., Displacement Damage Effects in InGaAs Photodiodes due to Electron, Proton, and Neutron Irradiations; *TNS July 2020 1263-1272*
Nurnberg, A., see Kremastiotis, I., *TNS Oct. 2020 2263-2272*
Nusair, O., see Lv, P., *TNS Dec. 2020 2501-2510*

O

O'Brien, A., see Manfredi, J.J., *TNS Feb. 2020 434-442*
O'Donnell, J.M., see Auden, E.C., *TNS Jan. 2020 29-37*
O'Donnell, J.M., see Wender, S.A., *TNS June 2020 1114-1117*
O'Hara, A., see Bonaldo, S., *TNS Jan. 2020 210-220*
O'Neal, S., Cherepy, N., Hok, S., and Payne, S., Performance of High Stopping Power Bismuth-Loaded Plastic Scintillators for Radiation Portal Monitors; *TNS April 2020 746-751*
O'Shea, J.N., see Williams, J.O.D., *TNS Sept. 2020 1987-1992*
Obara, S., see Nakamura, K.Z., *TNS July 2020 1772-1776*
Oblakowska-Mucha, A., see Fernandez Prieto, A., *TNS April 2020 732-739*
Obraztsova, O., Ottaviani, L., Geslot, B., de Izarra, G., Palais, O., Lyoussi, A., and Vervisch, W., Comparison Between Silicon Carbide and Diamond for Thermal Neutron Detection at Room Temperature; *TNS May 2020 863-871*
Obryk, B., see Dalla Betta, G., *TNS April 2020 543*
Ocherashvili, A., see Wengrowicz, U., *TNS April 2020 599-602*
Ochoa, I., see Xu, R., *TNS April 2020 698-707*
Odgers, K., see Lv, P., *TNS Dec. 2020 2501-2510*
Odian, A., see Lv, P., *TNS Dec. 2020 2501-2510*
Ogrenci-Memik, S., see Deptuch, G., *TNS Sept. 2020 2111-2118*
Ohashi, Y., see Kodama, S., *TNS June 2020 1055-1062*
Ohashi, Y., see Ueno, M., *TNS June 2020 1045-1048*
Ohashi, Y., see Yoshino, M., *TNS June 2020 999-1002*
Ohashi, Y., see Yamaji, A., *TNS June 2020 1027-1031*
Ohgaki, H., see Ali, K., *TNS Aug. 2020 1976-1984*
Ohshima, T., see Kobayashi, D., *TNS Jan. 2020 328-335*
Oikawa, K., see Kuroda, J., *TNS July 2020 1599-1605*
Okamoto, S., see Kobayashi, D., *TNS Jan. 2020 328-335*
Okasinski, J.S., see Vernon, E., *TNS April 2020 752-759*
Okowita, A., see Rose, P.B., *TNS July 2020 1765-1771*
Oliveira, D., dos Santos, F.F., Piscoya Davila, G., Cazzaniga, C., Frost, C., Baumann, R.C., and Rech, P., High-Energy Versus Thermal Neutron Contribution to Processor and Memory Error Rates; *TNS June 2020 1161-1168*
Olsen, J., see Deptuch, G., *TNS Sept. 2020 2111-2118*
Omelkov, S., see Saaring, J., *TNS June 2020 1009-1013*

Omet, M., see Bellandi, A., *TNS May 2020 762-767*
Omprakash, A.P., see Nergui, D., *TNS Jan. 2020 91-98*
Omprakash, A.P., see Ildefonso, A., *TNS Jan. 2020 71-80*
Onken, R., see Bellandi, A., *TNS May 2020 762-767*
Orion, I., see Wengrowicz, U., *TNS April 2020 599-602*
Oriunno, M., see Lv, P., *TNS Dec. 2020 2501-2510*
Orrell, J.L., see Lv, P., *TNS Dec. 2020 2501-2510*
Orsich, P., Dormenev, V., Brinkmann, K., Korjik, M., Moritz, M., Novotny, R., and Zaunick, H., Stimulated Recovery of the Radiation Damage in Lead Tungstate Crystals; *TNS June 2020 952-955*
Ortega, G.S., see Lv, P., *TNS Dec. 2020 2501-2510*
Osovitzky, A., see Wengrowicz, U., *TNS April 2020 599-602*
Osovitzky, A., see Pritchard, K., *TNS Jan. 2020 414-421*
Osovitzky, A., see Vax, E., *TNS April 2020 544-551*
Ostrovskiy, I., see Lv, P., *TNS Dec. 2020 2501-2510*
Osusky, F., see Cerba, S., *TNS April 2020 636-643*
Otake, Y., Shimazoe, K., Mitsuya, Y., Uenomachi, M., Seng, F.W., Kamada, K., Yoshikawa, A., Sakuragi, S., Binder, T., and Takahashi, H., Performance Evaluation of Liquinert-Processed CeBr₃ Crystals Coupled With a Multipixel Photon Counter; *TNS June 2020 988-993*
Otalora, J., see Fernandez Prieto, A., *TNS April 2020 732-739*
Ottaviani, L., see Obraztsova, O., *TNS May 2020 863-871*
Ouerdane, Y., see Morana, A., *TNS Jan. 2020 305-311*
Ouerdane, Y., see Girard, S., *TNS Jan. 2020 289-295*
Ouerdane, Y., see Morana, A., *TNS Jan. 2020 284-288*
Ouerdane, Y., see Aubry, M., *TNS Jan. 2020 278-283*
Ouerdane, Y., see Cheymol, G., *TNS April 2020 669-678*
Ouerdane, Y., see Morana, A., *TNS July 2020 1637-1642*
Ouerdane, Y., see Campanella, C., *TNS July 2020 1643-1649*
Ouerdane, Y., see Bahout, J., *TNS July 2020 1658-1662*
Ouerdane, Y., see De Michele, V., *TNS July 2020 1650-1657*
Ouerdane, Y., see Cheymol, G., *TNS June 2020 1195*
Ouin, G., see Nelson, G.T., *TNS Sept. 2020 2051-2061*
Ouyang, X., see He, N., *TNS Jan. 2020 400-404*
Overman, C.T., see Lv, P., *TNS Dec. 2020 2501-2510*
Ozawa, O., see Watanabe, T., *TNS Aug. 2020 1835-1845*

P

Paccagnella, A., see Bagatin, M., *TNS Jan. 2020 154-160*
Paccagnella, A., see Zhao, S.E., *TNS Jan. 2020 253-259*
Paccagnella, A., see Bonaldo, S., *TNS Jan. 2020 210-220*
Paccagnella, A., see Bagatin, M., *TNS July 2020 1421-1427*
Paccagnella, A., see Bonaldo, S., *TNS July 2020 1302-1311*
Paccagnella, A., see Bonaldo, S., *TNS July 2020 1312-1319*
Paccagnella, A., see Cecchetto, M., *TNS July 2020 1412-1420*
Paillet, P., see Girard, S., *TNS Jan. 2020 289-295*
Paillet, P., see Fleetwood, D., *TNS Jan. 2020 7*
Paillet, P., see Goiffon, V., *TNS Jan. 2020 234-244*
Paillet, P., see Le Roch, A., *TNS Jan. 2020 268-277*
Paillet, P., see Le Roch, A., *TNS July 2020 1241-1250*
Paillet, P., see Fleetwood, D., *TNS July 2020 1201*
Paillet, P., see Rizzolo, S., *TNS July 2020 1256-1262*
Paillet, P., see Dewitte, H., *TNS July 2020 1284-1292*
Paillet, P., see De Michele, V., *TNS July 2020 1650-1657*
Paillet, P., see Riffaud, J., *TNS Oct. 2020 2172-2178*
Pakari, O., see Vitullo, F., *TNS April 2020 625-635*
Palais, O., see Obraztsova, O., *TNS May 2020 863-871*
Pan, L., Feng, Y., Kandlakunta, P., Huang, J., and Cao, L.R., Performance of Perovskite CsPbBr₃ Single Crystal Detector for Gamma-Ray Detection; *TNS Feb. 2020 443-449*
Pan, L., Feng, Y., Huang, J., and Cao, L.R., Comparison of Zr, Bi, Ti, and Ga as Metal Contacts in Inorganic Perovskite CsPbBr₃ Gamma-Ray Detector; *TNS Oct. 2020 2255-2262*
Pan, Z., see Wang, L., *TNS July 2020 1360-1364*
Pancheri, L., see Ratti, L., *TNS July 2020 1293-1301*

- Pande, N., Kumar, S., Everson, L.R., and Kim, C.H.**, Understanding the Key Parameter Dependences Influencing the Soft-Error Susceptibility of Standard Combinational Logic; *TNS Jan. 2020 116-125*
- Pandey, I.R., Daniel, D.J., Kim, H.J., Kim, Y.D., Lee, M.H., and Khan, S.**, Characterization of Silver-Doped LiF Crystal Grown by Czochralski Technique for Dark Matter Search Application; *TNS June 2020 915-921*
- Pang, X.**, see Zhang, J., *TNS July 2020 1691-1698*
- Pang, Y.**, see Li, L., *TNS Aug. 2020 1826-1834*
- Pang, Y.**, see Li, L., *TNS Sept. 2020 2062-2072*
- Pangaud, P.**, see Habib, A., *TNS Feb. 2020 455-463*
- Pantelides, S.T.**, see Bonaldo, S., *TNS Jan. 2020 210-220*
- Papadimitriou, C.**, see Hands, A.D.P., *TNS Jan. 2020 181-190*
- Papadopoulou, A.**, see Grace, C.R., *TNS May 2020 823-831*
- Parent, S.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Parishkin, Y.A.**, see Fedorov, V.A., *TNS April 2020 688-693*
- Park, B.**, see Lee, K., *TNS July 2020 1374-1380*
- Park, H.**, see Vuong, P.Q., *TNS Oct. 2020 2290-2294*
- Park, S.**, see Kim, Y., *TNS April 2020 592-598*
- Parkes, C.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Parrinello, T.**, see Bourdarie, S., *TNS Oct. 2020 2196-2202*
- Parsons, J.**, see Xu, R., *TNS April 2020 698-707*
- Parvais, B.**, see Bonaldo, S., *TNS July 2020 1312-1319*
- Passard, C.**, see Ben Mosbah, M., *TNS April 2020 662-668*
- Passard, C.**, see Eleon, C., *TNS Sept. 2020 2096-2104*
- Passoth, E.**, see Nuns, T., *TNS July 2020 1263-1272*
- Patel, B.**, see Loveless, T.D., *TNS Jan. 2020 99-107*
- Patel, M.**, see Zhang, Z., *TNS Sept. 2020 2042-2050*
- Patel, T.**, see Kalyani, ., *TNS Nov. 2020 2415-2420*
- Patre, B.M.**, see Desai, R.J., *TNS June 2020 1076-1085*
- Pattanaboonmee, N.**, see Chewpraditkul, W., *TNS June 2020 910-914*
- Pattanaboonmee, N.**, see Chewpraditkul, W., *TNS June 2020 904-909*
- Pattanaboonmee, N.**, see Sakthong, O., *TNS Oct. 2020 2295-2299*
- Pauletta, G.**, see Mastroianni, S., *TNS May 2020 832-839*
- Paulmier, T.**, see Ben Zaid, A., *TNS Jan. 2020 191-200*
- Pautz, A.**, see Vitullo, F., *TNS April 2020 625-635*
- Pavlovsky, R.**, see Vavrek, J.R., *TNS Nov. 2020 2421-2430*
- Payan, D.**, see Ben Zaid, A., *TNS Jan. 2020 191-200*
- Payan, E.**, see Tisseur, D., *TNS July 2020 1715-1721*
- Payne, S.**, see O'Neal, S., *TNS April 2020 746-751*
- Pazdernik, K.**, see Gillis, W.C., *TNS Nov. 2020 2321-2328*
- Pechenkin, A.A.**, see Shvetsov-Shilovskiy, I.I., *TNS July 2020 1540-1546*
- Pedersen, J.W.**, see Ichimura, K., *TNS June 2020 894-897*
- Pedreschi, E.**, see Atanov, N., *TNS June 2020 978-982*
- Pejchal, J.**, see Kodama, S., *TNS June 2020 1055-1062*
- Pellegrini, G.**, see Rafi, J.M., *TNS Dec. 2020 2481-2489*
- Pena-Fernandez, M., Lindoso, A., Entrena, L., and Garcia-Valderas, M.**, The Use of Microprocessor Trace Infrastructures for Radiation-Induced Fault Diagnosis; *TNS Jan. 2020 126-134*
- Pena-Fernandez, M., Lindoso, A., Entrena, L., and Garcia-Valderas, M.**, Error Detection and Mitigation of Data-Intensive Microprocessor Applications Using SIMD and Trace Monitoring; *TNS July 2020 1452-1460*
- Peng, C.**, see Yue, S., *TNS July 2020 1339-1344*
- Peng, C.**, see Sun, L., *TNS Sept. 2020 2148-2154*
- Peng, W.**, see Wu, M., *TNS April 2020 708-715*
- Peplow, D.E.**, see Nicholson, A.D., *TNS Aug. 2020 1968-1975*
- Peracchi, S., Tran, L.T., James, B., Bolst, D., Prokopovich, D.A., Davis, J.A., Guatelli, S., Petasecca, M., Lerch, M.L.F., Matsufuji, N., Kok, A., Povoli, M., Jackson, M., and Rosenfeld, A.B.**, A Solid-State Microdosimeter for Dose and Radiation Quality Monitoring for Astronauts in Space; *TNS Jan. 2020 169-174*
- Peracchi, S.**, see James, B., *TNS Jan. 2020 146-153*
- Pereira-Da-Costa, H.**, see Azmoun, B., *TNS Aug. 2020 1869-1876*
- Pervertaylo, V.L.**, see Biasi, G., *TNS March 2020 534-540*
- Perez, M.**, see Alcalde Bessia, F., *TNS Oct. 2020 2217-2223*
- Perez-Celis, A., and Wirthlin, M.J.**, Statistical Method to Extract Radiation-Induced Multiple-Cell Upsets in SRAM-Based FPGAs; *TNS Jan. 2020 50-56*
- Perez-Celis, A.**, see Cannon, M.J., *TNS Jan. 2020 312-320*
- Perez-Lara, C.E.**, see Azmoun, B., *TNS Aug. 2020 1869-1876*
- Peric, I.**, see Kremastiotis, I., *TNS Oct. 2020 2263-2272*
- Pernegger, H.**, see Habib, A., *TNS Feb. 2020 455-463*
- Perot, B.**, see Ben Mosbah, M., *TNS April 2020 662-668*
- Perot, B.**, see Bottau, V., *TNS April 2020 575-584*
- Perot, B.**, see Marchais, T., *TNS April 2020 654-661*
- Perot, B.**, see Eleon, C., *TNS Sept. 2020 2096-2104*
- Perrella, S.**, see Giordano, R., *TNS Aug. 2020 1852-1860*
- Perret, G.**, see Vitullo, F., *TNS April 2020 625-635*
- Petasecca, M.**, see Peracchi, S., *TNS Jan. 2020 169-174*
- Petasecca, M.**, see James, B., *TNS Jan. 2020 146-153*
- Petasecca, M.**, see Biasi, G., *TNS March 2020 534-540*
- Petasecca, M.**, see Kok, A., *TNS Dec. 2020 2490-2500*
- Pezzullo, G.**, see Atanov, N., *TNS June 2020 978-982*
- Pfeiffer, S.**, see Bellandi, A., *TNS May 2020 762-767*
- Pia, M.G.**, see Dalla Betta, G., *TNS April 2020 543*
- Pia, M.G.**, see Basaglia, T., *TNS March 2020 492-501*
- Piacentino, G.M.**, see Mastroianni, S., *TNS May 2020 832-839*
- Piepkke, A.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Pinelli, D.**, see Vernon, E., *TNS April 2020 752-759*
- Pinsard, E.**, see Morana, A., *TNS Jan. 2020 284-288*
- Pinto, C.**, see Sampaio, J.M., *TNS Sept. 2020 2028-2033*
- Pinto, M.**, see Sampaio, J.M., *TNS Sept. 2020 2028-2033*
- Piscoya Davila, G.**, see Oliveira, D., *TNS June 2020 1161-1168*
- Pitcher, E.**, see Iwashita, H., *TNS Nov. 2020 2363-2369*
- Pocar, A.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Poivey, C.**, see Bagatin, M., *TNS Jan. 2020 154-160*
- Poivey, C.**, 2019 IEEE Nuclear and Space Radiation Effects Conference Awards: Comments by the Chairman; *TNS Jan. 2020 9-10*
- Poivey, C.**, see Sampaio, J.M., *TNS Sept. 2020 2028-2033*
- Polly, S.J.**, see Nelson, G.T., *TNS Sept. 2020 2051-2061*
- Polychronakos, V.**, see Yao, L., *TNS Sept. 2020 2155-2160*
- Ponkratov, Y.V.**, see Kashaykin, P.F., *TNS Oct. 2020 2162-2171*
- Popov, N.**, see Shendrik, R., *TNS June 2020 946-951*
- Popovich, K., Kleparnik, K., Ledvina, V., Neuzilova, B., Fleissmann, J., Skodova, M., Kobera, L., Mihokova, E., Mucka, V., and Cuba, V.**, Luminescent Nanocomposites for Biomedical Applications; *TNS June 2020 962-968*
- Porcheron, E.**, see Magne, S., *TNS April 2020 617-624*
- Porter, F.**, see Atanov, N., *TNS June 2020 978-982*
- Portosi, V.**, see Laneve, D., *TNS May 2020 768-776*
- Possamai Bastos, R., Dutertre, J., Garay Trindade, M., Viera, R.A.C., Potin, O., Letiche, M., Cheymol, B., and Beaucour, J.**, Assessment of On-Chip Current Sensor for Detection of Thermal-Neutron-Induced Transients; *TNS July 2020 1404-1411*
- Potin, O.**, see Possamai Bastos, R., *TNS July 2020 1404-1411*
- Pouget, V.**, see Rajkowski, T., *TNS July 2020 1494-1502*
- Pouget, V.**, see Niskanen, K., *TNS July 2020 1365-1373*
- Pouget, V.**, see Aguiar, Y.Q., *TNS July 2020 1581-1589*
- Povoli, M.**, see Peracchi, S., *TNS Jan. 2020 169-174*
- Povoli, M.**, see James, B., *TNS Jan. 2020 146-153*
- Povoli, M.**, see Kok, A., *TNS Dec. 2020 2490-2500*
- Pratte, J.-.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Prenat, G.**, see Coi, O., *TNS July 2020 1674-1681*
- Preston, M., Calen, H., Johansson, T., Kavatsyuk, M., Makonyi, K., Marciniowski, P., Schakel, P., and Tegner, P.**, Proton- and Neutron-Induced Single-Event Upsets in FPGAs for the PANDA Experiment; *TNS June 2020 1093-1106*
- Prisco, R.A.**, see Laneve, D., *TNS May 2020 768-776*
- Pritchard, K., Osovitzky, A., Ziegler, J., Binkley, E., Tsai, P., Hadad, N., Jackson, M., Hurlbut, C., Baltic, G.M., Majkrzak, C.F., and Maliszewskij, N.C.**, ⁶LiF:ZnS(Ag) Neutron Detector Performance Optimized Using Waveform Recordings and ROC Curves; *TNS Jan. 2020 414-421*
- Privat, A., Davis, P.W., Barnaby, H.J., and Adell, P.C.**, Total Dose Effects on Negative and Positive Low-Dropout Linear Regulators; *TNS July 2020 1332-1338*
- Prochazkova, L.**, see Tomanova, K., *TNS June 2020 933-938*
- Prod'homme, T.**, see Lucsanyi, D., *TNS July 2020 1623-1628*

Prokopovich, D.A., see Peracchi, S., *TNS Jan. 2020 169-174*
Prokopovich, D.A., see James, B., *TNS Jan. 2020 146-153*
Provatas, G., see Hands, A.D.P., *TNS Jan. 2020 181-190*
Prudenzano, F., see Laneve, D., *TNS May 2020 768-776*
Pryschelski, H., see Sikora, D., *TNS Sept. 2020 2136-2142*
Puchner, H., see Alia, R.G., *TNS Jan. 2020 345-352*
Puchner, H., see Rezaei, M., *TNS Oct. 2020 2188-2195*
Puchner, H., see Korkian, G., *TNS Nov. 2020 2345-2352*
Puchner, H.K., see Gonzalez, C.J., *TNS March 2020 518-524*
Pullia, A., see Capra, S., *TNS Aug. 2020 1877-1884*
Purschke, M.L., see Azmoun, B., *TNS Aug. 2020 1869-1876*
Putcha, V., see Zhao, S.E., *TNS Jan. 2020 253-259*
Putcha, V., see Bonaldo, S., *TNS Jan. 2020 210-220*
Putcha, V., see Bonaldo, S., *TNS July 2020 1312-1319*

Q

Qian, R., see Wang, H., *TNS May 2020 805-810*
Qiao, M., see Shu, L., *TNS June 2020 1133-1138*
Qiao, M., see Wang, R., *TNS Sept. 2020 2009-2014*
Qiao, M., see Shu, L., *TNS Nov. 2020 2392-2395*
Qin, J., see Fan, Y., *TNS Oct. 2020 2246-2254*
Qu, Y., see Yu, X., *TNS April 2020 716-721*
Quaranta, O., see Vernon, E., *TNS April 2020 752-759*
Quartemont, N.J., Bickley, A.A., and Bevins, J.E., Nuclear Data Covariance Analysis in Radiation-Transport Simulations Utilizing SCALE Sampler and the IRDFF Nuclear Data Library; *TNS March 2020 482-491*
Quinn, H., see Fleetwood, D., *TNS Jan. 2020 7*
Quinn, H., see James, B., *TNS Jan. 2020 321-327*
Quinn, H., see Fleetwood, D., *TNS July 2020 1201*
Quinn, H.M., see Auden, E.C., *TNS Jan. 2020 29-37*
Quiter, B.J., see Bandstra, M.S., *TNS May 2020 777-790*
Quiter, B.J., see Vavrek, J.R., *TNS Nov. 2020 2421-2430*

R

Rachwal, B., see Fernandez Prieto, A., *TNS April 2020 732-739*
Radeka, V., see Lv, P., *TNS Dec. 2020 2501-2510*
Radulovic, V., see Gruel, A., *TNS April 2020 559-567*
Raffaelli, F., see Atanov, N., *TNS June 2020 978-982*
Rafi, J.M., Pellegrini, G., Godignon, P., Ugobono, S.O., Rius, G., Tsunoda, I., Yoneoka, M., Takakura, K., Kramberger, G., and Moll, M., Electron, Neutron, and Proton Irradiation Effects on SiC Radiation Detectors; *TNS Dec. 2020 2481-2489*
Raguzin, E., see Lv, P., *TNS Dec. 2020 2501-2510*
Raimi-Zlatic, D., see Lavelle, C.M., *TNS Jan. 2020 389-399*
Raine, M., see Jarrin, T., *TNS July 2020 1273-1283*
Raine, M., see Riffaud, J., *TNS Oct. 2020 2172-2178*
Rajkowski, T., Saigne, F., Pouget, V., Wrobel, F., Touboul, A., Boch, J., Kohler, P., Dubus, P., and Wang, P.X., Analysis of SET Propagation in a System in Package Point of Load Converter; *TNS July 2020 1494-1502*
Raman, A., see Johnson, R.A., *TNS Jan. 2020 135-139*
Randall, G., see Heymes, J., *TNS Aug. 2020 1962-1967*
Rao, S.G., see Tzintzarov, G.N., *TNS Jan. 2020 260-267*
Rashko, A., see Sklyarchuk, V., *TNS Nov. 2020 2439-2444*
Rashdan, A.A., see Davis, K.L., *TNS April 2020 585-591*
Rathiah, M., see Kucera, M., *TNS June 2020 1049-1054*
Ratti, L., Brogi, P., Collazuol, G., Betta, G.D., Ficorella, A., Marrocchesi, P.S., Morsani, F., Pancheri, L., Torilla, G., and Vacchi, C., DCR Performance in Neutron-Irradiated CMOS SPADs From 150- to 180-nm Technologies; *TNS July 2020 1293-1301*
Raveh, A., see Wengrowicz, U., *TNS April 2020 599-602*
Rawat, S., see Kalyani, ., *TNS Nov. 2020 2415-2420*
Ray, B., see Kumari, P., *TNS Sept. 2020 2021-2027*
Rech, P., see Basso, P.M., *TNS July 2020 1560-1565*
Rech, P., see Libano, F., *TNS July 2020 1478-1484*
Rech, P., see Goncalves, M.M., *TNS July 2020 1573-1580*

Rech, P., see Oliveira, D., *TNS June 2020 1161-1168*
Reed, R.A., see Brewer, R.M., *TNS Jan. 2020 108-115*
Reed, R.A., see Johnson, R.A., *TNS Jan. 2020 135-139*
Reed, R.A., see Ryder, L.D., *TNS Jan. 2020 38-43*
Reed, R.A., see Austin, R.A., *TNS Jan. 2020 353-357*
Reed, R.A., see Ryder, K.L., *TNS Jan. 2020 57-62*
Reed, R.A., see Ball, D.R., *TNS Jan. 2020 22-28*
Reed, R.A., see Zhao, S.E., *TNS Jan. 2020 253-259*
Reed, R.A., see Gorchichko, M., *TNS Jan. 2020 245-252*
Reed, R.A., see Bonaldo, S., *TNS Jan. 2020 210-220*
Reed, R.A., see Bonaldo, S., *TNS July 2020 1312-1319*
Reed, R.A., see Black, J.D., *TNS June 2020 1125-1132*
Reed, R.A., see Wang, P., *TNS Sept. 2020 2015-2020*
Refaeli, N., see Haran, A., *TNS Aug. 2020 1803-1812*
Reising, D.R., see Loveless, T.D., *TNS Jan. 2020 99-107*
Remy, L., see Cheymol, G., *TNS April 2020 669-678*
Remy, L., see Cheymol, G., *TNS June 2020 1195*
Ren, M., see Li, L., *TNS March 2020 508-517*
Ren, M., see Li, L., *TNS Aug. 2020 1826-1834*
Ren, M., see Li, L., *TNS Sept. 2020 2062-2072*
Ren, Z., see Chen, J., *TNS May 2020 818-822*
Ren, Z., An, X., Li, G., Chen, G., Li, M., Yu, G., Guo, Q., Zhang, X., and Huang, R., TID Response of Bulk Si PMOS FinFETs: Bias, Fin Width, and Orientation Dependence; *TNS July 2020 1320-1325*
Rescia, S., see Lv, P., *TNS Dec. 2020 2501-2510*
Retiere, F., see Lv, P., *TNS Dec. 2020 2501-2510*
Revolle, M., see Azmoun, B., *TNS Aug. 2020 1869-1876*
Rey, L., see Bourdarie, S., *TNS Oct. 2020 2196-2202*
Rey, R., see Ben Zaid, A., *TNS Jan. 2020 191-200*
Rey, S., see Fabero, J.C., *TNS July 2020 1461-1469*
Reynard-Carette, C., see Volte, A., *TNS Nov. 2020 2405-2414*
Reyneri, L.M., see Serrano-Cases, A., *TNS July 2020 1511-1520*
Rezaei, M., Martin-Holgado, P., Morilla, Y., Franco, F.J., Fabero, J.C., Mecha, H., Puchner, H., Hubert, G., and Clemente, J.A., Evaluation of a COTS 65-nm SRAM Under 15 MeV Protons and 14 MeV Neutrons at Low VDD; *TNS Oct. 2020 2188-2195*
Rezaei, M., see Korkian, G., *TNS Nov. 2020 2345-2352*
Ribeiro, P., see Sampaio, J.M., *TNS Sept. 2020 2028-2033*
Ribiere, M., de Dortan, F.d.G., Delaunay, R., Aubert, D., Gouriou, T., Maissonny, R., and d'Almeida, T., Quantitative Study of Pulsed X-Ray-Induced Electromagnetic Response in Coaxial Cables; *TNS July 2020 1722-1731*
Ricci, M., see Atanov, N., *TNS June 2020 978-982*
Richard, N., see Jarrin, T., *TNS July 2020 1273-1283*
Richard, N., see Riffaud, J., *TNS Oct. 2020 2172-2178*
Richards, E.W., Loveless, T.D., Kauppila, J.S., Haeffner, T.D., Holman, W.T., and Massengill, L.W., Radiation Hardened by Design Subsampling Phase-Locked Loop Techniques in PD-SOI; *TNS June 2020 1144-1151*
Richman, M., see Lv, P., *TNS Dec. 2020 2501-2510*
Riffaud, J., Gaillardin, M., Marcandella, C., Richard, N., Duhamel, O., Martinez, M., Raine, M., Paillet, P., Lagutere, T., Andrieu, F., Barraud, S., Vinet, M., and Faynot, O., TID Response of Nanowire Field-Effect Transistors: Impact of the Back-Gate Bias; *TNS Oct. 2020 2172-2178*
Rinnert, K., see Fernandez Prieto, A., *TNS April 2020 732-739*
Rius, G., see Rafi, J.M., *TNS Dec. 2020 2481-2489*
Rizzolo, S., see Le Roch, A., *TNS July 2020 1241-1250*
Rizzolo, S., Le Roch, A., Marcelot, O., Corbiere, F., Paillet, P., Gaillardin, M., Magnan, P., and Goiffon, V., High Displacement Damage Dose Effects in Radiation Hardened CMOS Image Sensors; *TNS July 2020 1256-1262*
Rizzolo, S., see Dewitte, H., *TNS July 2020 1284-1292*
Robin, T., see Morana, A., *TNS Jan. 2020 305-311*
Robin, T., see Morana, A., *TNS Jan. 2020 284-288*
Robin, T., see Aubry, M., *TNS Jan. 2020 278-283*
Robin, T., see Morana, A., *TNS July 2020 1637-1642*
Robinson, A., see Lv, P., *TNS Dec. 2020 2501-2510*
Robinson, W., see Fleetwood, D., *TNS Jan. 2020 7*
Robinson, W., see Fleetwood, D., *TNS July 2020 1201*
Roca, R., see Loveless, T.D., *TNS Jan. 2020 99-107*

- Roche, P.**, see Abouzeid, F., *TNS July 2020 1326-1331*
- Rodbell, K.P.**, Low-Energy Protons—Where and Why “Rare Events” Matter; *TNS July 2020 1204-1215*
- Rodgers, D.**, see Hands, A.D.P., *TNS Jan. 2020 181-190*
- Rodnyi, P.**, see Wiczorek, H., *TNS Aug. 2020 1934-1945*
- Rodrigues, G.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Roed, K.**, see Wyrwoll, V., *TNS July 2020 1590-1598*
- Roed, K.**, see Wyrwoll, V., *TNS July 2020 1530-1539*
- Ronda, C.**, see Wiczorek, H., *TNS Aug. 2020 1934-1945*
- Rose, P.B.**, Okowita, A., Lance, M.J., and Sword, E., Onset of Fogging and Degradation in Polyvinyl Toluene-Based Scintillators; *TNS July 2020 1765-1771*
- Rosenfeld, A.B.**, see Peracchi, S., *TNS Jan. 2020 169-174*
- Rosenfeld, A.B.**, see James, B., *TNS Jan. 2020 146-153*
- Rosenfeld, A.B.**, see Biasi, G., *TNS March 2020 534-540*
- Rosenfeld, A.B.**, see Kok, A., *TNS Dec. 2020 2490-2500*
- Rossignol, T.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Rougeault, S.**, see Cheymol, G., *TNS April 2020 669-678*
- Rougeault, S.**, see Cheymol, G., *TNS June 2020 1195*
- Rowson, P.C.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Roy, N.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Ruffenach, A.**, see Dyer, A., *TNS June 2020 1139-1143*
- Ruffenach, M.**, Bourdarie, S., Mekki, J., Falguere, D., Vaille, J.R., Carron, J., Bourdoux, P., and Nguyen, L., A Proton Sensor for Energies From 2 to 20 MeV; *TNS July 2020 1351-1359*
- Ruffien-Ciszak, A.**, see Magne, S., *TNS April 2020 617-624*
- Rumaiz, A.K.**, see Vernon, E., *TNS April 2020 752-759*
- Runge, J.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Rutigliani, G.**, see Laneve, D., *TNS May 2020 768-776*
- Rutstrom, D.J.**, see Wang, S., *TNS June 2020 876-879*
- Rybaniec, R.**, see Bellandi, A., *TNS May 2020 762-767*
- Rybaniec, R.**, see Cichalewski, W., *TNS Sept. 2020 2119-2127*
- Ryden, K.**, see Dyer, A., *TNS June 2020 1139-1143*
- Ryden, K.A.**, see Hands, A.D.P., *TNS Jan. 2020 181-190*
- Ryder, K.L.**, see Ryder, L.D., *TNS Jan. 2020 38-43*
- Ryder, K.L.**, Ryder, L.D., Sternberg, A.L., Kozub, J.A., Zhang, E.X., Khachatrian, A., Buchner, S.P., Mcmorrow, D.P., Hales, J.M., Zhao, Y., Wang, L., Wang, C., Weller, R.A., Schrimpf, R.D., Weiss, S.M., and Reed, R.A., Comparison of Sensitive Volumes Associated With Ion- and Laser-Induced Charge Collection in an Epitaxial Silicon Diode; *TNS Jan. 2020 57-62*
- Ryder, L.D.**, Ryder, K.L., Sternberg, A.L., Kozub, J.A., Gong, H., Zhang, E.X., Linten, D., Mitard, J., Weller, R.A., Schrimpf, R.D., Weiss, S.M., and Reed, R.A., Polarization Dependence of Pulsed Laser-Induced SEEs in SOI Fin-FETs; *TNS Jan. 2020 38-43*
- Ryder, L.D.**, see Ryder, K.L., *TNS Jan. 2020 57-62*
- S**
- Saaring, J.**, Feldbach, E., Nagirnyi, V., Omelkov, S., Vanetsev, A., and Kirm, M., Ultrafast Radiative Relaxation Processes in Multication Cross-Luminescence Materials; *TNS June 2020 1009-1013*
- Saigne, F.**, see Rajkowski, T., *TNS July 2020 1494-1502*
- Saigne, F.**, see Niskanen, K., *TNS July 2020 1365-1373*
- Saigne, F.**, see Coronetti, A., *TNS July 2020 1606-1613*
- Saigne, F.**, see Aguiar, Y.Q., *TNS July 2020 1581-1589*
- Saito, T.Y.**, see Mahara, T., *TNS July 2020 1555-1559*
- Sajjad, M.**, Chaudhuri, S.K., Kleppinger, J.W., and Mandal, K.C., Growth of Large-Area Cd_{0.8}Zn_{0.1}Te Single Crystals and Fabrication of Pixelated Guard-Ring Detector for Room-Temperature γ -Ray Detection; *TNS Aug. 2020 1946-1951*
- Sakamoto, K.**, see Kobayashi, D., *TNS Jan. 2020 328-335*
- Sakthong, O.**, see Chewpraditkul, W., *TNS June 2020 910-914*
- Sakthong, O.**, see Chewpraditkul, W., *TNS June 2020 904-909*
- Sakthong, O.**, Chewpraditkul, W., Pattanaboonmee, N., Chewpraditkul, W., Yamaji, A., Kamada, K., Kurosawa, S., Yoshikawa, A., Witkowski, M., Drozdowski, W., Szczesniak, T., Moszynski, M., Babin, V., and Nikl, M., Light Yield and Timing Characteristics of Lu_{0.8}Gd_{0.2}(Al_{1-x}Gax)O₁₂:Ce,Mg Single Crystals; *TNS Oct. 2020 2295-2299*
- Sakuragi, S.**, see Otaka, Y., *TNS June 2020 988-993*
- Salas, J.G.**, see Black, J.D., *TNS June 2020 1125-1132*
- Saldanha, R.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Samarkhanov, K.K.**, see Kashaykin, P.F., *TNS Oct. 2020 2162-2171*
- Sampaio, J.M.**, Goncalves, P., Pinto, M., Silva, J., Negirneac, V., Sintra, L., Pinto, C., Sousa, T., Ribeiro, P., and Poivey, C., Dose Measurements and Simulations of the RADFETs Response Onboard the Alphasat CTTB Experiments; *TNS Sept. 2020 2028-2033*
- Sanchez Graz, C.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Sandberg, I.**, see Hands, A.D.P., *TNS Jan. 2020 181-190*
- Sangiorgio, S.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Santanastasio, F.**, Precision Timing in the CMS MTD Barrel Timing Layer With Crystal Bars and SiPMs; *TNS Sept. 2020 2105-2110*
- Santi, L.**, see Mastroianni, S., *TNS May 2020 832-839*
- Santin, G.**, see Bagatin, M., *TNS Jan. 2020 154-160*
- Santin, G.**, see Bagatin, M., *TNS July 2020 1421-1427*
- Santos, F.F.d.**, see Basso, P.M., *TNS July 2020 1560-1565*
- Saputi, A.**, see Atanov, N., *TNS June 2020 978-982*
- Saracco, P.**, see Basaglia, T., *TNS March 2020 492-501*
- Sardet, A.**, see Gruel, A., *TNS April 2020 559-567*
- Sarkar, P.S.**, see Kalyani, ., *TNS Nov. 2020 2415-2420*
- Sarra, I.**, see Atanov, N., *TNS June 2020 978-982*
- Sarrailh, P.**, see Ben Zaid, A., *TNS Jan. 2020 191-200*
- Sasano, M.**, see Kodama, S., *TNS June 2020 1055-1062*
- Sato, A.**, see Mahara, T., *TNS July 2020 1555-1559*
- Sato, H.**, see Kodama, S., *TNS June 2020 1055-1062*
- Sato, H.**, see Ueno, M., *TNS June 2020 1045-1048*
- Sato, H.**, see Yoshino, M., *TNS June 2020 999-1002*
- Sato, H.**, see Yamaji, A., *TNS June 2020 1027-1031*
- Sato, H.**, see Iwashita, H., *TNS Nov. 2020 2363-2369*
- Sato, Y.**, see Kishishita, T., *TNS Sept. 2020 2089-2095*
- Scantlebury-Smead, L.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Scarpa, R.**, see Magne, S., *TNS April 2020 617-624*
- Schakel, P.**, see Preston, M., *TNS June 2020 1093-1106*
- Scheuer, K.**, Holmes, J., Galyaev, E., Blyth, D., and Alarcon, R., Radiation Effects on FR4 Printed Circuit Boards; *TNS Aug. 2020 1846-1851*
- Schiller, M.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Schindler, H.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Schlarb, H.**, see Sikora, D., *TNS Sept. 2020 2136-2142*
- Schmidt, C.**, see Bellandi, A., *TNS May 2020 762-767*
- Schoepff, V.**, see Lynde, C., *TNS April 2020 679-687*
- Schrimpf, R.D.**, see Brewer, R.M., *TNS Jan. 2020 108-115*
- Schrimpf, R.D.**, see Johnson, R.A., *TNS Jan. 2020 135-139*
- Schrimpf, R.D.**, see Ryder, L.D., *TNS Jan. 2020 38-43*
- Schrimpf, R.D.**, see Austin, R.A., *TNS Jan. 2020 353-357*
- Schrimpf, R.D.**, see Ryder, K.L., *TNS Jan. 2020 57-62*
- Schrimpf, R.D.**, see Ball, D.R., *TNS Jan. 2020 22-28*
- Schrimpf, R.D.**, see Zhao, S.E., *TNS Jan. 2020 253-259*
- Schrimpf, R.D.**, see Gorchichko, M., *TNS Jan. 2020 245-252*
- Schrimpf, R.D.**, see Bonaldo, S., *TNS Jan. 2020 210-220*
- Schrimpf, R.D.**, see Bonaldo, S., *TNS July 2020 1312-1319*
- Schrimpf, R.D.**, see Black, J.D., *TNS June 2020 1125-1132*
- Schrimpf, R.D.**, see Wang, P., *TNS Sept. 2020 2015-2020*
- Schweickhardt, J.**, see Klingbeil, H., *TNS Jan. 2020 361-368*
- Seemann, J.**, see Kumar, S., *TNS June 2020 1169-1174*
- Segura, J.**, see Torrens, G., *TNS May 2020 811-817*
- Seifert, N.**, see Neale, A., *TNS Jan. 2020 15-21*
- Sekiya, H.**, see Ichimura, K., *TNS June 2020 894-897*
- Sekutowicz, J.**, see Cichalewski, W., *TNS Sept. 2020 2119-2127*
- Sellin, P.J.**, see Taggart, M.P., *TNS April 2020 603-608*
- Selyaev, N.A.**, see Fedorov, V.A., *TNS April 2020 688-693*
- Seman Bobulska, D.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Semjonov, S.L.**, see Kashaykin, P.F., *TNS Oct. 2020 2162-2171*
- Seng, F.W.**, see Otaka, Y., *TNS June 2020 988-993*
- Seo, J.H.**, see Shin, C.D., *TNS Sept. 2020 1996-2002*
- Seol, W.H.**, see Woo, J., *TNS April 2020 740-745*
- Seon, J.**, see Woo, J., *TNS April 2020 740-745*

- Serrano-Cases, A.**, Reyneri, L.M., Morilla, Y., Cuenca-Asensi, S., and Martinez-Alvarez, A., Empirical Mathematical Model of Microprocessor Sensitivity and Early Prediction to Proton and Neutron Radiation-Induced Soft Errors; *TNS July 2020 1511-1520*
- Shan, X.**, see Wang, L., *TNS July 2020 1345-1350*
- Shao, G.**, see Thirimanne, H.M., *TNS Oct. 2020 2238-2245*
- Shao, S.**, see Yu, X., *TNS April 2020 716-721*
- Sharma, A.**, see Dikshit, B., *TNS Dec. 2020 2465-2473*
- Sharma, D.K.**, see Jain, A., *TNS Nov. 2020 2303-2310*
- Shears, T.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Shen, G.**, see Zhu, G., *TNS July 2020 1702-1709*
- Shen, Y.**, see Thirimanne, H.M., *TNS Oct. 2020 2238-2245*
- Shendrik, R.**, Popov, N., and Myasnikova, A., F-Centers in BaBrI Single Crystal; *TNS June 2020 946-951*
- Shi, J.**, see Li, L., *TNS March 2020 508-517*
- Shi, W.**, see Yu, X., *TNS April 2020 716-721*
- Shimazoe, K.**, see Otake, Y., *TNS June 2020 988-993*
- Shimjith, S.R.**, see Desai, R.J., *TNS June 2020 1076-1085*
- Shimjith, S.R.**, see Mishra, A.K., *TNS Aug. 2020 1791-1802*
- Shin, C.D.**, Joo, K.K., Seo, J.H., and Atif, Z., Study on Reactor Neutrino Directionality Search Utilizing Vertex Information Reconstructed by PMT Operating State in a Liquid Scintillator Detector; *TNS Sept. 2020 1996-2002*
- Shindou, H.**, see Kobayashi, D., *TNS Jan. 2020 328-335*
- Shirabe, S.**, see Kishishita, T., *TNS Sept. 2020 2089-2095*
- Shirkov, G.**, see Chen, G., *TNS Jan. 2020 369-373*
- Shizuma, T.**, see Ali, K., *TNS Aug. 2020 1976-1984*
- Shoji, M.**, see Kishishita, T., *TNS Sept. 2020 2089-2095*
- Shoji, Y.**, see Yoshino, M., *TNS June 2020 999-1002*
- Short, M.P.**, see Logan, J.V., *TNS Nov. 2020 2382-2391*
- Shu, L.**, Zhao, Y., Galloway, K.F., Wang, L., Zhao, K., Zhou, X., Liu, C., Cao, W., Sui, C., Chen, W., Xiao, L., and Wang, T., TID-Induced Breakdown Voltage Degradation in Uniform and Linear Variable Doping SOI p-LDMOS-FETs; *TNS July 2020 1390-1394*
- Shu, L.**, Wang, L., Zhao, K., Zhou, X., Zhao, Y., Galloway, K.F., Sui, C., Liu, C., Cao, W., Chen, W., Qiao, M., and Wang, T., TID-Induced OFF-State Leakage Current in Partially Radiation-Hardened SOI LDMOS; *TNS June 2020 1133-1138*
- Shu, L.**, Zhao, Y., Galloway, K.F., Wang, L., Wang, X., Yuan, Z., Zhou, X., Chen, W., Qiao, M., and Wang, T., Effect of Drift Length on Shifts in 400-V SOI LDMOS Breakdown Voltage Due to TID; *TNS Nov. 2020 2392-2395*
- Shuai, L.**, see Zhang, J., *TNS July 2020 1691-1698*
- Shvetsov-Shilovskiy, I.I.**, Chumakov, A.I., Pechenkin, A.A., and Bobrovsky, D.V., Nonstable Latchups in CMOS ICs Under Pulsed Laser Irradiation; *TNS July 2020 1540-1546*
- Shy, D.**, Xia, J., and He, Z., Artifacts in High-Energy Compton Imaging With 3-D Position-Sensitive CdZnTe; *TNS Aug. 2020 1920-1928*
- Siddons, P.**, see Vernon, E., *TNS April 2020 752-759*
- Sierawski, B.D.**, see Brewer, R.M., *TNS Jan. 2020 108-115*
- Sierawski, B.D.**, see Austin, R.A., *TNS Jan. 2020 353-357*
- Sierawski, B.D.**, see Ball, D.R., *TNS Jan. 2020 22-28*
- Sierawski, B.D.**, see Wang, P., *TNS Sept. 2020 2015-2020*
- Sikora, D.**, Czuba, K., Jatczak, P., Urbanski, M., Schlarb, H., Ludwig, F., and Pryszchelski, H., Phase Drift Compensating RF Link for Femtosecond Synchronization of E-XFEL; *TNS Sept. 2020 2136-2142*
- Silva, J.**, see Sampaio, J.M., *TNS Sept. 2020 2028-2033*
- Silva, S.R.P.**, see Thirimanne, H.M., *TNS Oct. 2020 2238-2245*
- Silveira, M.A.G.**, see de Oliveira, A.B., *TNS July 2020 1503-1510*
- Simonson, B.**, Johanson, R.E., and Kasap, S.O., Effects of High-Dose X-Ray Irradiation on the Hole Lifetime in Vacuum-Deposited Stabilized a-Se Photoconductive Films: Implications to the Quality Control of a-Se Used in X-Ray Detectors; *TNS Nov. 2020 2445-2453*
- Singh, A.K.**, see Kalyani, ., *TNS Nov. 2020 2415-2420*
- Singh, B.**, see Marshall, M.S.J., *TNS June 2020 969-973*
- Sintra, L.**, see Sampaio, J.M., *TNS Sept. 2020 2028-2033*
- Skarpaas, K.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Sklyarchuk, O.**, see Sklyarchuk, V., *TNS Nov. 2020 2439-2444*
- Sklyarchuk, V.**, Zakharuk, Z., Solodin, S., Rarenko, A., Sklyarchuk, O., Fochuk, P., Bolotnikov, A., and James, R.B., Effect of the Electric Field Strength on the Energy Resolution of Cr/CdTe/Pt Detectors; *TNS Nov. 2020 2439-2444*
- Skodova, M.**, see Popovich, K., *TNS June 2020 962-968*
- Smith, G.**, see Vernon, E., *TNS April 2020 752-759*
- Smith, J.**, see Liang, F., *TNS June 2020 927-932*
- Smith, J.A.**, Dhulla, V.H., Mukherjee, S.S., Lauenstein, J., Hare, R.J., Zorn, C.J., and Hostetler, C.A., Evaluation of an Operational Concept for Improving Radiation Tolerance of Single-Photon Avalanche Diode (SPAD) Arrays; *TNS May 2020 797-804*
- Snoch, A.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Snoeys, W.**, see Habib, A., *TNS Feb. 2020 455-463*
- Snoj, L.**, see Gruel, A., *TNS April 2020 559-567*
- Sobolev, A.**, see Gektin, A., *TNS June 2020 880-887*
- Soderstrom, D.**, see Coronetti, A., *TNS July 2020 1606-1613*
- Solodin, S.**, see Sklyarchuk, V., *TNS Nov. 2020 2439-2444*
- Soma, A.K.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Soman, M.**, see Heymes, J., *TNS Aug. 2020 1962-1967*
- Song, J.**, see Liu, Z., *TNS Aug. 2020 1904-1911*
- Song, S.**, see Yu, X., *TNS April 2020 716-721*
- Song, Y.**, see Chen, G., *TNS Jan. 2020 369-373*
- Soos, C.**, see Mendes, E., *TNS March 2020 473-481*
- Sopczak, A.**, Timepix3 Luminosity Determination of 13-TeV Proton-Proton Collisions at the ATLAS Experiment; *TNS April 2020 609-616*
- Sosa, C.**, see Marshall, M.S.J., *TNS June 2020 969-973*
- Sosa, C.**, see Bhattacharya, P., *TNS June 2020 1032-1034*
- Sotskov, D.I.**, Elesin, V.V., Kuznetsov, A.G., Zhidkov, N.M., Metelkin, I.O., Amburkin, K.M., Amburkin, D.M., Usachev, N.A., Boychenko, D.V., and Elesina, V.V., Displacement Damage Effects Mitigation Approach for Heterojunction Bipolar Transistor Frequency Synthesizers; *TNS Nov. 2020 2396-2404*
- Sousa, T.**, see Sampaio, J.M., *TNS Sept. 2020 2028-2033*
- Soussan, D.**, see Abouzeid, F., *TNS July 2020 1326-1331*
- Spannagel, S.**, see Kremastiotis, I., *TNS Oct. 2020 2263-2272*
- Spinella, F.**, see Atanov, N., *TNS June 2020 978-982*
- Spor, S.**, see Wiczorek, H., *TNS Aug. 2020 1934-1945*
- St-Hilaire, G.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- St. Croix, A.D.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Stadnikia, K.**, see Henderson, K., *TNS May 2020 840-857*
- Stanacevic, M.**, see Vernon, E., *TNS April 2020 752-759*
- Stand, L.**, see Wang, S., *TNS June 2020 876-879*
- Standarovski, D.**, see Aubry, M., *TNS July 2020 1251-1255*
- Stark, R.**, see Martinella, C., *TNS July 2020 1381-1389*
- Steadman, R.**, see Wiczorek, H., *TNS Aug. 2020 1934-1945*
- Stefanov, K.D.**, see Meng, X., *TNS June 2020 1107-1113*
- Stein, O.**, see Bilko, K., *TNS July 2020 1682-1690*
- Stein, O.**, see Cecchetto, M., *TNS July 2020 1412-1420*
- Stekhanov, V.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Sternberg, A.L.**, see Johnson, R.A., *TNS Jan. 2020 135-139*
- Sternberg, A.L.**, see Ryder, L.D., *TNS Jan. 2020 38-43*
- Sternberg, A.L.**, see Ryder, K.L., *TNS Jan. 2020 57-62*
- Sternberg, A.L.**, see Ball, D.R., *TNS Jan. 2020 22-28*
- Sternberg, A.L.**, see Wang, P., *TNS Sept. 2020 2015-2020*
- Sterpone, L.**, Luoni, F., Azimi, S., and Du, B., A 3-D Simulation-Based Approach to Analyze Heavy Ions-Induced SET on Digital Circuits; *TNS Sept. 2020 2034-2041*
- Stiegler, T.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Stone, J.M.**, Editorial Conference Comments by the General Chair; *TNS Jan. 2020 4-6*
- Studer, E.**, see Magne, S., *TNS April 2020 617-624*
- Su, F.**, see Biasi, G., *TNS March 2020 534-540*
- Su, T.**, see Xie, B., *TNS June 2020 1066-1075*
- Sucha, A.**, see Tomanova, K., *TNS June 2020 933-938*
- Suehara, T.**, see Kishishita, T., *TNS Sept. 2020 2089-2095*
- Sugiyama, H.**, Kondo, H., Sumiyoshi, T., and Tokanai, F., Gas Scintillation Imager With Capillary Plate; *TNS June 2020 1035-1039*
- Sui, C.**, see Shu, L., *TNS July 2020 1390-1394*

Sui, C., *see* Shu, L., *TNS June 2020 1133-1138*
 Sumiyoshi, T., *see* Sugiyama, H., *TNS June 2020 1035-1039*
 Summanwar, A., *see* Kok, A., *TNS Dec. 2020 2490-2500*
 Sun, L., Liang, F., Lin, J., Guo, C., Xu, Y., Liao, S., and Peng, C., Scalable Self-Adaptive Synchronous Triggering System in Superconducting Quantum Computing; *TNS Sept. 2020 2148-2154*
 Sun, N., *see* Xu, R., *TNS April 2020 698-707*
 Sun, X.L., *see* Lv, P., *TNS Dec. 2020 2501-2510*
 Suzdal, V., *see* Gektin, A., *TNS June 2020 880-887*
 Svihra, P., *see* Fernandez Prieto, A., *TNS April 2020 732-739*
 Sword, E., *see* Rose, P.B., *TNS July 2020 1765-1771*
 Szadkowski, Z., Least Mean Squares Filters Suppressing the Radio-Frequency Interference in AERA Cosmic Ray Radio Detection; *TNS Jan. 2020 405-413*
 Szczesniak, T., *see* Chewpraditkul, W., *TNS June 2020 910-914*
 Szczesniak, T., *see* Chewpraditkul, W., *TNS June 2020 904-909*
 Szczesniak, T., *see* Sakthong, O., *TNS Oct. 2020 2295-2299*
 Szumlak, T., *see* Fernandez Prieto, A., *TNS April 2020 732-739*

T

Taggart, M.P., Nakhostin, M., and Sellin, P.J., Optimizing the Sensitivity of a GAGG:Ce-Based Thermal Neutron Detector; *TNS April 2020 603-608*
 Taira, Y., *see* Ali, K., *TNS Aug. 2020 1976-1984*
 Takahashi, H., *see* Otake, Y., *TNS June 2020 988-993*
 Takakura, K., *see* Rafi, J.M., *TNS Dec. 2020 2481-2489*
 Takeshita, S., *see* Liao, W., *TNS July 2020 1566-1572*
 Takeuchi, T., *see* Watanabe, T., *TNS Aug. 2020 1835-1845*
 Tali, M., *see* Kastriotou, M., *TNS Jan. 2020 63-70*
 Tali, M., *see* Alia, R.G., *TNS Jan. 2020 345-352*
 Tali, M., *see* Wyrwoll, V., *TNS July 2020 1590-1598*
 Tali, M., *see* Cecchetto, M., *TNS July 2020 1412-1420*
 Tamagno, L., *see* Tisseur, D., *TNS July 2020 1715-1721*
 Tambara, L.A., *see* de Oliveira, A.B., *TNS July 2020 1503-1510*
 Tampo, M., *see* Liao, W., *TNS July 2020 1566-1572*
 Tan, T.D., *see* Hung, D.T., *TNS Oct. 2020 2224-2230*
 Tanaka, H., *see* Kodama, S., *TNS June 2020 1055-1062*
 Tanaka, M.M., *see* Kishishita, T., *TNS Sept. 2020 2089-2095*
 Tanaka, S., *see* Nakamura, K.Z., *TNS July 2020 1772-1776*
 Tang, H., *see* He, N., *TNS Jan. 2020 400-404*
 Tang, H., *see* Zhang, J., *TNS July 2020 1691-1698*
 Tang, S., *see* Yao, L., *TNS Sept. 2020 2155-2160*
 Tao, J., *see* Liu, Z., *TNS Aug. 2020 1904-1911*
 Tarka, M., *see* Lv, P., *TNS Dec. 2020 2501-2510*
 Tartoni, N., Chatterji, S., Crook, R., Krings, T., Bombelli, L., and Alborini, A., Hexagonal Pad Multichannel Ge X-Ray Spectroscopy Detector Demonstrator: Comprehensive Characterization; *TNS Aug. 2020 1952-1961*
 Tassielli, G., *see* Atanov, N., *TNS June 2020 978-982*
 Tegner, P., *see* Preston, M., *TNS June 2020 1093-1106*
 Teman, A., *see* Haran, A., *TNS Aug. 2020 1803-1812*
 Temperton, R.H., *see* Williams, J.O.D., *TNS Sept. 2020 1987-1992*
 Teng, J., *see* Tzintzarov, G.N., *TNS Jan. 2020 260-267*
 Tereshchenko, V., *see* Atanov, N., *TNS June 2020 978-982*
 Tereshchenko, V., *see* Atanov, N., *TNS July 2020 1760-1764*
 Thirimanne, H.M., Jayawardena, K.D.G.I., Nisbet, A., Shen, Y., Bandara, R.M.I., Mills, C.A., Shao, G., and Silva, S.R.P., Hybrid Multipixel Array X-Ray Detectors for Real-Time Direct Detection of Hard X-Rays; *TNS Oct. 2020 2238-2245*
 Thurlow, C.A., *see* Cannon, M.J., *TNS Jan. 2020 312-320*
 Tian, R., *see* Zhu, G., *TNS July 2020 1702-1709*
 Tisseur, D., Eck, D., Estre, N., Kistler, M., Payan, E., and Tamagno, L., Detector Upgrade for Fast MeV X-Ray Imaging for Severe Accidents Experiments; *TNS July 2020 1715-1721*
 Tiwari, A.P., *see* Desai, R.J., *TNS June 2020 1076-1085*
 Tiwari, A.P., *see* Mishra, A.K., *TNS Aug. 2020 1791-1802*
 Toda, A., and Kishimoto, S., X-Ray Detection Capabilities of Plastic Scintillators Incorporated With ZrO₂ Nanoparticles; *TNS June 2020 983-987*
 Todd, J., *see* Lv, P., *TNS Dec. 2020 2501-2510*
 Tojo, J., *see* Kishishita, T., *TNS Sept. 2020 2089-2095*
 Tokanai, F., *see* Sugiyama, H., *TNS June 2020 1035-1039*
 Tomanova, K., Sucha, A., Mihokova, E., Prochazkova, L., Jakubec, I., Turtos, R.M., Gundacker, S., Auffray, E., and Cuba, V., CsPbBr₃ Thin Films on LYSO:Ce Substrates; *TNS June 2020 933-938*
 Tomashuk, A.L., *see* Kashaykin, P.F., *TNS Oct. 2020 2162-2171*
 Tomono, D., *see* Mahara, T., *TNS July 2020 1555-1559*
 Tondut, L., *see* Bottau, V., *TNS April 2020 575-584*
 Tonigan, A.M., *see* Black, J.D., *TNS June 2020 1125-1132*
 Tonigan, A.M., *see* Wang, P., *TNS Sept. 2020 2015-2020*
 Torii, T., *see* Kodama, S., *TNS June 2020 1055-1062*
 Torii, T., *see* Morishita, Y., *TNS Oct. 2020 2203-2208*
 Torilla, G., *see* Ratti, L., *TNS July 2020 1293-1301*
 Torrens, G., Alheyasat, A., Alorda, B., Barcelo, S., Segura, J., and Bota, S.A., Transistor Width Effect on the Power Supply Voltage Dependence of α -SER in CMOS 6T SRAM; *TNS May 2020 811-817*
 Torres, L., *see* Coi, O., *TNS July 2020 1674-1681*
 Totev, T.I., *see* Lv, P., *TNS Dec. 2020 2501-2510*
 Toubon, H., *see* Marchais, T., *TNS April 2020 654-661*
 Touboul, A., *see* Rajkowski, T., *TNS July 2020 1494-1502*
 Touboul, A.D., *see* Niskanen, K., *TNS July 2020 1365-1373*
 Touboul, A.D., *see* Aguiar, Y.Q., *TNS July 2020 1581-1589*
 Toyoda, S., *see* Kodama, S., *TNS June 2020 1055-1062*
 Toyoda, S., *see* Ueno, M., *TNS June 2020 1045-1048*
 Toyoda, S., *see* Yamaji, A., *TNS June 2020 1027-1031*
 Toyokawa, H., *see* Ali, K., *TNS Aug. 2020 1976-1984*
 Tran, L.T., *see* Peracchi, S., *TNS Jan. 2020 169-174*
 Tran, L.T., *see* James, B., *TNS Jan. 2020 146-153*
 Tran, L.T., *see* Kok, A., *TNS Dec. 2020 2490-2500*
 Tran, N., *see* Deptuch, G., *TNS Sept. 2020 2111-2118*
 Trinczek, M., *see* Belanger-Champagne, C., *TNS Jan. 2020 161-168*
 Trippe, J.M., *see* Black, J.D., *TNS June 2020 1125-1132*
 Troska, J., *see* Mendes, E., *TNS March 2020 473-481*
 Trtik, P., *see* Miller, S.R., *TNS Aug. 2020 1929-1933*
 Tsai, P., *see* Pritchard, K., *TNS Jan. 2020 414-421*
 Tsang, R., *see* Lv, P., *TNS Dec. 2020 2501-2510*
 Tsang, T., *see* Lv, P., *TNS Dec. 2020 2501-2510*
 Tsibizov, A., *see* Martinella, C., *TNS July 2020 1381-1389*
 Tsigkanos, A., *see* Hands, A.D.P., *TNS Jan. 2020 181-190*
 Tsiligiannis, G., *see* Gnemmi, G., *TNS July 2020 1614-1622*
 Tsuchiya, K., *see* Watanabe, T., *TNS Aug. 2020 1835-1845*
 Tsukita, Y., *see* Ebara, M., *TNS July 2020 1470-1477*
 Tsunoda, I., *see* Rafi, J.M., *TNS Dec. 2020 2481-2489*
 Tsutumi, Y., *see* Kishishita, T., *TNS Sept. 2020 2089-2095*
 Tuhvatulina, T., *see* Wiczorek, H., *TNS Aug. 2020 1934-1945*
 Turtos, R.M., *see* Tomanova, K., *TNS June 2020 933-938*
 Turturica, G., *see* Ali, K., *TNS Aug. 2020 1976-1984*
 Tyagi, M., *see* Daniel, D.J., *TNS June 2020 898-903*
 Tyagi, M., *see* Kalyani, ., *TNS Nov. 2020 2415-2420*
 Tzintzarov, G.N., Ildefonso, A., Goley, P.S., Frounchi, M., Nergui, D., Rao, S.G., Teng, J., Campbell, J., Khachatrian, A., Buchner, S.P., McMorro, D., Warner, J.H., Kaynak, M., Zimmermann, L., and Cressler, J.D., Electronic-to-Photonic Single-Event Transient Propagation in a Segmented Mach-Zehnder Modulator in a Si/SiGe Integrated Photonics Platform; *TNS Jan. 2020 260-267*
 Tzintzarov, G.N., *see* Goley, P.S., *TNS Jan. 2020 296-304*
 Tzintzarov, G.N., *see* Nergui, D., *TNS Jan. 2020 91-98*
 Tzintzarov, G.N., *see* Ildefonso, A., *TNS Jan. 2020 71-80*
 Tzintzarov, G.N., *see* Hales, J.M., *TNS Jan. 2020 81-90*
 Tzintzarov, G.N., *see* Ildefonso, A., *TNS July 2020 1521-1529*

U

Uchida, T., *see* Nakamura, K.Z., *TNS July 2020 1772-1776*
 Ueno, M., Kim, K.J., Kamada, K., Babin, V., Nikl, M., Nihei, T., Yoshino, M., Yamaji, A., Toyoda, S., Sato, H., Yokota, Y., Kurosawa, S., Ohashi, Y., Kochurikhin, V.V., and Yoshikawa, A., Bulk Single Crystal Growth of W

Co-Doped Ce:Gd₃Ga₃Al₂O₁₂ by Czochralski Method; *TNS June 2020 1045-1048*

- Unomachi, M.**, see Otaka, Y., *TNS June 2020 988-993*
Ugobono, S.O., see Rafi, J.M., *TNS Dec. 2020 2481-2489*
Uhlar, R., Alexa, P., Harkut, O., and Harokova, P., Modified Texas Convention Method for Fast Neutron Flux Measurements; *TNS Jan. 2020 382-388*
Unal, M., see Xu, R., *TNS April 2020 698-707*
Unno, Y., see Lee, I.S., *TNS Sept. 2020 2143-2147*
Unruh, T.C., see Davis, K.L., *TNS April 2020 585-591*
Ur, C.A., see Ali, K., *TNS Aug. 2020 1976-1984*
Urbanski, M., see Sikora, D., *TNS Sept. 2020 2136-2142*
Usachev, N.A., see Sotskov, D.I., *TNS Nov. 2020 2396-2404*
Usami, H., see Kodama, S., *TNS June 2020 1055-1062*
Usubov, Z., see Atanov, N., *TNS June 2020 978-982*
Uytendhouwen, I., see Davis, K.L., *TNS April 2020 585-591*

V

- Vacchi, C.**, see Ratti, L., *TNS July 2020 1293-1301*
Vachon, F., see Lv, P., *TNS Dec. 2020 2501-2510*
Vacri, M.L.D., see Lv, P., *TNS Dec. 2020 2501-2510*
Vaille, J.R., see Ruffenach, M., *TNS July 2020 1351-1359*
Valmalette, J., see Derraji, K., *TNS April 2020 568-574*
van Beuzekom, M., see Fernandez Prieto, A., *TNS April 2020 732-739*
Van Dyck, S., see Davis, K.L., *TNS April 2020 585-591*
Van Hiep, C., see Hung, D.T., *TNS Oct. 2020 2224-2230*
Van Nieuwenhove, R., and Vermeeren, L., Nuclear Heating Measurements by Gamma and Neutron Thermometers; *TNS Sept. 2020 2073-2080*
Van Uffelen, M., see Le Roch, A., *TNS July 2020 1241-1250*
van Waasen, S., see Kumar, S., *TNS June 2020 1169-1174*
Vanat, T., see Kremastiotis, I., *TNS Oct. 2020 2263-2272*
Vandenbroucke, M., see Azmoun, B., *TNS Aug. 2020 1869-1876*
Vanderlip, W.J., see Vavrek, J.R., *TNS Nov. 2020 2421-2430*
Vanetsev, A., see Saaring, J., *TNS June 2020 1009-1013*
Vasic-Milovanovic, A., see Arbutina, D., *TNS Oct. 2020 2231-2237*
Vasil'ev, A.N., see Gektin, A., *TNS June 2020 880-887*
Vasiliev, S.A., see Kashaykin, P.F., *TNS Oct. 2020 2162-2171*
Vasilyev, I.I., see Atanov, N., *TNS June 2020 978-982*
Vasilyev, M., see Anniyev, T., *TNS Aug. 2020 1885-1892*
Vavrek, J.R., Hellfeld, D., Bandstra, M.S., Negut, V., Meehan, K., Vanderlip, W.J., Cates, J.W., Pavlovsky, R., Quiter, B.J., Cooper, R.J., and Joshi, T.H.Y., Reconstructing the Position and Intensity of Multiple Gamma-Ray Point Sources With a Sparse Parametric Algorithm; *TNS Nov. 2020 2421-2430*
Vax, E., Marcus, E., Mazor, T., Kadmon, Y., and Osovizky, A., Collimator-Less Passive Gamma Scanning for Radioactive Waste Drums; *TNS April 2020 544-551*
Vazquez Regueiro, P., see Fernandez Prieto, A., *TNS April 2020 732-739*
Veeraraghavan, V., see Lv, P., *TNS Dec. 2020 2501-2510*
Velazco, R., see Franco, F.J., *TNS July 2020 1547-1554*
Velazco, R., see Fabero, J.C., *TNS July 2020 1461-1469*
Velthuis, J., see Fernandez Prieto, A., *TNS April 2020 732-739*
Venanzoni, G., see Mastroianni, S., *TNS May 2020 832-839*
Venevtsev, I., see Wieczorek, H., *TNS Aug. 2020 1934-1945*
Vermeeren, L., see Van Nieuwenhove, R., *TNS Sept. 2020 2073-2080*
Verner, K.M., see Davis, K.L., *TNS April 2020 585-591*
Verneuil, A., see Cheymol, G., *TNS April 2020 552-558*
Vernon, E., De Geronimo, G., Baldwin, J., Chen, W., Fried, J., Giacomini, G., Kuczewski, A., Kuczewski, J., Mead, J., Miceli, A., Okasinski, J.S., Pinelli, D., Quaranta, O., Rumaiz, A.K., Siddons, P., Smith, G., Stanacevic, M., and Woods, R., Development of a High-Rate Front-End ASIC for X-Ray Spectroscopy and Diffraction Applications; *TNS April 2020 752-759*
Vervisch, W., see Obraztsova, O., *TNS May 2020 863-871*
Vezhlev, E., see Kumar, S., *TNS June 2020 1169-1174*
Vidalot, J., see Morana, A., *TNS Jan. 2020 305-311*
Vidalot, J., see Girard, S., *TNS Jan. 2020 289-295*
Vidalot, J., see Aubry, M., *TNS Jan. 2020 278-283*
Vidalot, J., see De Michele, V., *TNS July 2020 1650-1657*

+ Check author entry for coauthors

- Viel, S.**, see Lv, P., *TNS Dec. 2020 2501-2510*
Viera, R.A.C., see Possamai Bastos, R., *TNS July 2020 1404-1411*
Villain, S., see Derraji, K., *TNS April 2020 568-574*
Vinet, M., see Riffaud, J., *TNS Oct. 2020 2172-2178*
Virmontois, C., see Goiffon, V., *TNS Jan. 2020 234-244*
Virmontois, C., see Le Roch, A., *TNS Jan. 2020 268-277*
Virmontois, C., see Le Roch, A., *TNS July 2020 1241-1250*
Visser, G., see Lv, P., *TNS Dec. 2020 2501-2510*
Vitullo, F., Lamirand, V., Mosset, J., Frajtag, P., Pakari, O., Perret, G., and Pautz, A., A mm³ Fiber-Coupled Scintillator for In-Core Thermal Neutron Detection in CROCUS; *TNS April 2020 625-635*
Vivo-Vilches, C., see Lv, P., *TNS Dec. 2020 2501-2510*
Vizkelethy, G., see Jasica, M.J., *TNS Jan. 2020 221-227*
Vizkelethy, G., see Wang, P., *TNS Sept. 2020 2015-2020*
Vogel, V., see Bellandi, A., *TNS May 2020 762-767*
Volasky, E., see Wengrowicz, U., *TNS April 2020 599-602*
Volkov, V., see Fernandez Prieto, A., *TNS April 2020 732-739*
Volte, A., Brun, J., Lyoussi, A., Carette, M., and Reynard-Carette, C., Qualification of a New Differential Calorimeter Configuration Dedicated to Nuclear Heating Rates up to 20 W.g⁻¹; *TNS Nov. 2020 2405-2414*
Vorobiev, V.A., see Fedorov, V.A., *TNS April 2020 688-693*
Voss, K.O., see Martinella, C., *TNS July 2020 1381-1389*
Vrban, B., see Cerba, S., *TNS April 2020 636-643*
Vrubel, I., see Wieczorek, H., *TNS Aug. 2020 1934-1945*
Vuilleumier, J., see Lv, P., *TNS Dec. 2020 2501-2510*
Vuong, P.Q., see Aryal, P., *TNS June 2020 922-926*
Vuong, P.Q., Kim, H.J., Khan, A., Khan, S., Kim, S.H., Park, H., and Kim, J., Silver-Doped LiI Crystal: A Sensitive Thermal Neutron Detector With Pulse Shape Discrimination; *TNS Oct. 2020 2290-2294*

W

- Wagenpfeil, M.**, see Lv, P., *TNS Dec. 2020 2501-2510*
Wager, T., see Lv, P., *TNS Dec. 2020 2501-2510*
Waldron, N., see Zhao, S.E., *TNS Jan. 2020 253-259*
Waldron, N., see Bonaldo, S., *TNS Jan. 2020 210-220*
Walent, M., see Lv, P., *TNS Dec. 2020 2501-2510*
Wampler, W.R., see Jasica, M.J., *TNS Jan. 2020 221-227*
Wang, C., see Ryder, K.L., *TNS Jan. 2020 57-62*
Wang, C., see Lu, B., *TNS June 2020 1175-1184*
Wang, H., Wang, Y., Cui, J., Wang, S., Liang, T., Mei, B., Liu, X., and Qian, R., A Low-Overhead FFT Design With Higher SEU Resilience Implemented in FPGA; *TNS May 2020 805-810*
Wang, J., see Chen, J., *TNS May 2020 818-822*
Wang, J., see Wang, L., *TNS July 2020 1360-1364*
Wang, J., see Wang, L., *TNS July 2020 1360-1364*
Wang, J., see Yue, S., *TNS July 2020 1339-1344*
Wang, J., see Li, Y., *TNS Dec. 2020 2474-2480*
Wang, L., see Ryder, K.L., *TNS Jan. 2020 57-62*
Wang, L., Pan, Z., Li, B., Wang, J., Guan, X., Wang, J., Liu, N., Wang, S., Zhang, X., Gu, R., Gong, Z., Wei, Z., Zhu, H., Liu, N., Li, B., Gao, J., Huang, Y., Liu, M., Yang, J., Li, X., Luo, J., Han, Z., and Liu, X., Mechanism Analysis of Proton Irradiation-Induced Increase of 3-dB Bandwidth of GaN-Based Microlight-Emitting Diodes for Space Light Communication; *TNS July 2020 1360-1364*
Wang, L., see Shu, L., *TNS July 2020 1390-1394*
Wang, L., Liu, N., Li, B., Zhu, H., Shan, X., Yuan, Q., Zhang, X., Gong, Z., Zhao, F., Liu, N., Liu, M., Li, B., Gao, J., Huang, Y., Yang, J., Li, X., Luo, J., Han, Z., and Liu, X., Comparison of X-Ray and Proton Irradiation Effects on the Characteristics of InGaN/GaN Multiple Quantum Wells Light-Emitting Diodes; *TNS July 2020 1345-1350*
Wang, L., see Shu, L., *TNS June 2020 1133-1138*
Wang, L., see Shu, L., *TNS Nov. 2020 2392-2395*
Wang, P., see Zhao, S.E., *TNS Jan. 2020 253-259*
Wang, P., see Gorchichko, M., *TNS Jan. 2020 245-252*
Wang, P., Sternberg, A.L., Sierawski, B.D., Zhang, E.X., Warren, K.M., Tonigan, A.M., Brewer, R.M., Dodds, N.A., Vizkelethy, G., Jordan, S.L.,

- Fleetwood, D.M., Reed, R.A., and Schrimpf, R.D., Sensitive-Volume Model of Single-Event Latchup for a 180-nm SRAM Test Structure; *TNS Sept. 2020 2015-2020*
- Wang, P.X.**, see Rajkowski, T., *TNS July 2020 1494-1502*
- Wang, Q.**, see Xu, R., *TNS April 2020 698-707*
- Wang, Q.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Wang, R.**, Li, Z., Qiao, M., Zhou, X., Wang, T., and Zhang, B., Total Ionizing Dose Effects in 30-V Split-Gate Trench VDMOS; *TNS Sept. 2020 2009-2014*
- Wang, S.**, see Wang, H., *TNS May 2020 805-810*
- Wang, S.**, see Wang, L., *TNS July 2020 1360-1364*
- Wang, S.**, Rutstrom, D.J., Stand, L., Koschan, M., Melcher, C.L., and Wu, Y., Optical and Scintillation Properties of Hf^{2+} Codoped $\text{SrI}_2:\text{Eu}^{2+}$ Single Crystals; *TNS June 2020 876-879*
- Wang, T.**, see Shu, L., *TNS July 2020 1390-1394*
- Wang, T.**, see Shu, L., *TNS June 2020 1133-1138*
- Wang, T.**, see Wang, R., *TNS Sept. 2020 2009-2014*
- Wang, T.**, see Shu, L., *TNS Nov. 2020 2392-2395*
- Wang, X.**, Li, Y., Zhou, M., Duan, J., Luo, H., Ye, L., Liu, X., and Lin, X., Theoretical Simulation of X-Ray Transmission Through a Polycapillary X-Ray Lens With a Variable Capillary Radius; *TNS May 2020 791-796*
- Wang, X.**, Ding, L., Luo, Y., Chen, W., Zhang, F., and Guo, X., A Statistical Method for MCU Extraction Without the Physical-to-Logical Address Mapping; *TNS July 2020 1443-1451*
- Wang, X.**, see Wei, Y., *TNS June 2020 939-945*
- Wang, X.**, see Shu, L., *TNS Nov. 2020 2392-2395*
- Wang, X.L.**, see Dai, H.T., *TNS June 2020 956-961*
- Wang, Y.**, see Wang, H., *TNS May 2020 805-810*
- Wang, Y.**, see Yue, S., *TNS July 2020 1339-1344*
- Wang, Y.**, see Wei, Y., *TNS June 2020 939-945*
- Wang, Y.**, see Wei, Y., *TNS June 2020 939-945*
- Wang, Y.**, see Hu, C., *TNS June 2020 1014-1019*
- Wang, Y.**, see Dai, H.T., *TNS June 2020 956-961*
- Wang, Y.Z.**, see Dai, H.T., *TNS June 2020 956-961*
- Wang, Z.**, see Hu, C., *TNS June 2020 1086-1092*
- Warner, J.**, see Hales, J.M., *TNS Jan. 2020 81-90*
- Warner, J.H.**, see Tzintzarov, G.N., *TNS Jan. 2020 260-267*
- Warner, J.H.**, see Ildelfonso, A., *TNS Jan. 2020 71-80*
- Warner, J.H.**, see Le Roch, A., *TNS Jan. 2020 268-277*
- Warner, J.H.**, see Ildelfonso, A., *TNS July 2020 1521-1529*
- Warren, K.M.**, see Wang, P., *TNS Sept. 2020 2015-2020*
- Wart, M.**, see Marshall, M.S.J., *TNS June 2020 969-973*
- Wart, M.**, see Bhattacharya, P., *TNS June 2020 1032-1034*
- Wart, M.**, see Miller, S.R., *TNS Aug. 2020 1929-1933*
- Wasiolek, M.**, see Kumari, P., *TNS Sept. 2020 2021-2027*
- Watanabe, T.**, Takeuchi, T., Ozawa, O., Komanome, H., Akahori, T., and Tsuchiya, K., A Radiation-Hardened CMOS Image Sensor With Pixels Exhibiting a Negligibly Small Dark-Level Increase During Ionizing Radiation; *TNS Aug. 2020 1835-1845*
- Watanabe, Y.**, see Mahara, T., *TNS July 2020 1555-1559*
- Watanabe, Y.**, see Kuroda, J., *TNS July 2020 1599-1605*
- Watanabe, Y.**, see Liao, W., *TNS July 2020 1566-1572*
- Watkins, J.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Watts, M.M.**, Mesick, K.E., Bartlett, K.D., and Coupland, D.D., Thermal Characterization of $\text{Tl}_2\text{LiYCl}_6:\text{Ce}$ (TLYC); *TNS March 2020 525-533*
- Webster, P.T.**, see Logan, J.V., *TNS Nov. 2020 2382-2391*
- Wei, L.**, see Zhang, J., *TNS July 2020 1691-1698*
- Wei, M.**, see Li, Y., *TNS Nov. 2020 2454-2462*
- Wei, Q.**, Zhang, Z., Dai, T., Liu, X., Luo, G., Xu, T., Jiang, N., and Liu, Y., Reducing $\text{NaI}(\text{Tl})$ Detector Spectrum Shift by Optimizing Pulse Integration Time; *TNS Feb. 2020 450-454*
- Wei, W.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Wei, Y.**, Zhang, Y., Zhang, Z., Wu, L., Dai, H., Liu, C., Zhao, C., Wang, Y., Zhao, Y., Jiang, P., Wang, Y., Alemanno, F., Di Santo, M., Catanzani, E., Wang, X., Xu, Z., and Huang, G., The Quenching Effect of BGO Crystals on Relativistic Heavy Ions in the DAMPE Experiment; *TNS June 2020 939-945*
- Wei, Y.F.**, see Dai, H.T., *TNS June 2020 956-961*
- Wei, Z.**, see Wang, L., *TNS July 2020 1360-1364*
- Weiss, S.M.**, see Ryder, L.D., *TNS Jan. 2020 38-43*
- Weiss, S.M.**, see Ryder, K.L., *TNS Jan. 2020 57-62*
- Weller, R.A.**, see Ryder, L.D., *TNS Jan. 2020 38-43*
- Weller, R.A.**, see Ryder, K.L., *TNS Jan. 2020 57-62*
- Weller, R.A.**, see Black, J.D., *TNS June 2020 1125-1132*
- Wen, J.**, see Li, Y., *TNS Nov. 2020 2454-2462*
- Wen, L.**, see Cai, Y., *TNS Aug. 2020 1861-1868*
- Wen, L.J.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Wen, S.**, see Cao, J., *TNS July 2020 1436-1442*
- Wen, X.**, and Hayward, J.P., Time Resolution Measurements of EJ-232Q With Single- and Dual-Sided Readouts; *TNS Sept. 2020 2081-2088*
- Wender, S.A.**, see Auden, E.C., *TNS Jan. 2020 29-37*
- Wender, S.A.**, O'Donnell, J.M., Zavorka, L., and Bhuva, B., Measured Energy-Dependent Neutron Attenuation Through the Stacked Printed Circuit Boards; *TNS June 2020 1114-1117*
- Wender, S.A.**, see Iwashita, H., *TNS Nov. 2020 2363-2369*
- Weng, X.**, see Chen, X., *TNS Aug. 2020 1893-1898*
- Wengang, S.**, Lijun, Z., and Guanying, W., A Method to Restrain Parameter Drift in Trapezoidal Pulse Shaping; *TNS July 2020 1710-1714*
- Wengrowicz, U.**, Osowitzky, A., Ocherashvili, A., Volasky, E., Ifergan, Y., Kadmon, Y., Raveh, A., and Orion, I., Neutron Detection Module Based on Li-Glass Scintillator and Array of SiPMs; *TNS April 2020 599-602*
- Whittaker, C.**, Giroux, J., Lariviere, D., Allen, C.N., and Beaulieu, L., Colloidal Quantum Dot-Doped Optical Fibers for Scintillation Dosimetry; *TNS June 2020 1040-1044*
- Wichoski, U.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Widenerhorn, R.**, see Hendrickson, B., *TNS July 2020 1732-1737*
- Widloecher, J.**, see Magne, S., *TNS April 2020 617-624*
- Wieczorek, H.**, Khanin, V., Ronda, C., Boerekamp, J., Spoor, S., Steadman, R., Venetsev, I., Chernenko, K., Tikhvatulina, T., Vruble, I., Meijerink, A., and Rodnyi, P., Band Gap Variation and Trap Distribution in Transparent Garnet Scintillator Ceramics; *TNS Aug. 2020 1934-1945*
- Wilkins, H.**, see Kastriotou, M., *TNS Jan. 2020 63-70*
- Williams, B.**, see Brown, S.T., *TNS Feb. 2020 464-472*
- Williams, J.O.D.**, Lapington, J.S., Campion, R., Foxon, T., Temperton, R.H., and O'Shea, J.N., Modeling Photocathode Performance Using Medea-VASP Simulation Software; *TNS Sept. 2020 1987-1992*
- Williams, M.**, see Fernandez Prieto, A., *TNS April 2020 732-739*
- Williams, M.**, see Kremastiotis, I., *TNS Oct. 2020 2263-2272*
- Williams, R.T.**, see Yoshikawa, A., *TNS June 2020 875*
- Williamson, M.R.**, see Brown, S.T., *TNS Feb. 2020 464-472*
- Willis, M.J.**, see Nicholson, A.D., *TNS Aug. 2020 1968-1975*
- Wilson, B.**, see Libano, F., *TNS July 2020 1478-1484*
- Wirthlin, M.**, see James, B., *TNS Jan. 2020 321-327*
- Wirthlin, M.**, see Libano, F., *TNS July 2020 1478-1484*
- Wirthlin, M.J.**, see Perez-Celis, A., *TNS Jan. 2020 50-56*
- Wirthlin, M.J.**, see Cannon, M.J., *TNS Jan. 2020 312-320*
- Witkiewicz-Lukaszek, S.**, see Kurosawa, S., *TNS June 2020 994-998*
- Witkowski, M.**, see Sakthong, O., *TNS Oct. 2020 2295-2299*
- Witkowski, M.E.**, see Chewpraditkul, W., *TNS June 2020 910-914*
- Witkowski, M.E.**, see Chewpraditkul, W., *TNS June 2020 904-909*
- Witulski, A.F.**, see Johnson, R.A., *TNS Jan. 2020 135-139*
- Witulski, A.F.**, see Austin, R.A., *TNS Jan. 2020 353-357*
- Witulski, A.F.**, see Ball, D.R., *TNS Jan. 2020 22-28*
- Woo, J.**, Seol, W.H., Chae, K.S., Lee, J.H., Lee, E.S., and Seon, J., Charging Monitor Aboard the Geostationary Satellite GK2A at 128.2° E Longitude; *TNS April 2020 740-745*
- Woods, R.**, see Vernon, E., *TNS April 2020 752-759*
- Woody, C.**, see Azmoun, B., *TNS Aug. 2020 1869-1876*
- Wrobel, F.**, see Alia, R.G., *TNS Jan. 2020 345-352*
- Wrobel, F.**, see Rajkowski, T., *TNS July 2020 1494-1502*
- Wrobel, F.**, see Niskanen, K., *TNS July 2020 1365-1373*
- Wrobel, F.**, see Cecchetto, M., *TNS July 2020 1412-1420*
- Wrobel, F.**, see Aguiar, Y.Q., *TNS July 2020 1581-1589*
- Wu, J.**, see Zhu, G., *TNS July 2020 1702-1709*
- Wu, L.**, see Wei, Y., *TNS June 2020 939-945*

- Wu, L.B.**, see Dai, H.T., *TNS June 2020 956-961*
- Wu, M.**, Zhang, C., Peng, W., Xu, J., Jin, H., Zeng, Y., and Chen, Z., A Radiation-Hardened Dual-Direction SCR Based on LDMOS for ESD Protection in the Extreme Radiation Environment; *TNS April 2020 708-715*
- Wu, P.**, see Xu, Z., *TNS Feb. 2020 425-433*
- Wu, S.X.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Wu, W.H.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Wu, X.**, see Li, L., *TNS Aug. 2020 1826-1834*
- Wu, X.**, see Li, L., *TNS Sept. 2020 2062-2072*
- Wu, X.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Wu, Y.**, see Yoshikawa, A., *TNS June 2020 875*
- Wu, Y.**, see Wang, S., *TNS June 2020 876-879*
- Wu, Y.**, see Li, L., *TNS Aug. 2020 1826-1834*
- Wu, Y.**, see Li, L., *TNS Sept. 2020 2062-2072*
- Wynne, K.B.**, see Nelson, G.T., *TNS Sept. 2020 2051-2061*
- Wyrwoll, V.**, see Kastriotou, M., *TNS Jan. 2020 63-70*
- Wyrwoll, V.**, see Alia, R.G., *TNS Jan. 2020 345-352*
- Wyrwoll, V.**, Alia, R.G., Roed, K., Fernandez-Martinez, P., Kastriotou, M., Cechetto, M., Kerboub, N., Tali, M., and Cerutti, F., Heavy Ion Nuclear Reaction Impact on SEE Testing: From Standard to Ultra-high Energies; *TNS July 2020 1590-1598*
- Wyrwoll, V.**, Alia, R.G., Roed, K., Cazzaniga, C., Kastriotou, M., Fernandez-Martinez, P., Coronetti, A., and Cerutti, F., Longitudinal Direct Ionization Impact of Heavy Ions on See Testing for Ultrahigh Energies; *TNS July 2020 1530-1539*

X

- Xia, J.**, see Shy, D., *TNS Aug. 2020 1920-1928*
- Xia, Q.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Xiang, H.**, see Yu, X., *TNS April 2020 716-721*
- Xiao, L.**, see Shu, L., *TNS July 2020 1390-1394*
- Xie, B.**, Niu, P., Su, T., Kaftandjian, V., Boussel, L., Douek, P., Yang, F., Duvauchelle, P., and Zhu, Y., ROI-Wise Material Decomposition in Spectral Photon-Counting CT; *TNS June 2020 1066-1075*
- Xie, X.**, see Bi, D., *TNS Nov. 2020 2337-2344*
- Xu, J.**, see He, N., *TNS Jan. 2020 400-404*
- Xu, J.**, see Wu, M., *TNS April 2020 708-715*
- Xu, L.**, see Cai, C., *TNS Jan. 2020 374-381*
- Xu, L.**, see Cao, J., *TNS July 2020 1436-1442*
- Xu, M.**, see He, N., *TNS Jan. 2020 400-404*
- Xu, M.**, see Chen, G., *TNS Jan. 2020 369-373*
- Xu, N.**, see Auden, E.C., *TNS Jan. 2020 29-37*
- Xu, R.**, Hsu, C., Kalani, S., Ban, J., Wang, Q., Ochoa, I., Burton, C., Unal, M., Sun, N., Kinget, P., Parsons, J., and Andeen, T., Single-Event Upset Responses of Metal-Oxide-Metal Capacitors and Diodes Used in Bulk 65-nm CMOS Analog Circuits; *TNS April 2020 698-707*
- Xu, T.**, see Wei, Q., *TNS Feb. 2020 450-454*
- Xu, Y.**, see Sun, L., *TNS Sept. 2020 2148-2154*
- Xu, Z.**, Meng, C., Jiang, Y., and Wu, P., 3-D Simulation of Cavity SGEMP Interference Generated by Pulsed X-Rays; *TNS Feb. 2020 425-433*
- Xu, Z.**, see Wei, Y., *TNS June 2020 939-945*
- Xu, Z.Z.**, see Dai, H.T., *TNS June 2020 956-961*

Y

- Yamada, K.**, see Ebara, M., *TNS July 2020 1470-1477*
- Yamada, S.**, see Liu, Z., *TNS Aug. 2020 1904-1911*
- Yamaji, A.**, see Chewpraditkul, W., *TNS June 2020 910-914*
- Yamaji, A.**, see Kodama, S., *TNS June 2020 1055-1062*
- Yamaji, A.**, see Ueno, M., *TNS June 2020 1045-1048*
- Yamaji, A.**, see Yoshino, M., *TNS June 2020 999-1002*
- Yamaji, A.**, see Ichimura, K., *TNS June 2020 894-897*
- Yamaji, A.**, Yamato, S., Kurosawa, S., Yoshino, M., Toyoda, S., Kamada, K., Yokota, Y., Sato, H., Ohashi, Y., and Yoshikawa, A., Crystal Growth and Scintillation Properties of Carbazole for Neutron Detection; *TNS June 2020 1027-1031*

- Yamaji, A.**, see Sakthong, O., *TNS Oct. 2020 2295-2299*
- Yamamoto, S.**, see Morishita, Y., *TNS Oct. 2020 2203-2208*
- Yamanaka, T.**, see Kishishita, T., *TNS Sept. 2020 2089-2095*
- Yamato, S.**, see Yamaji, A., *TNS June 2020 1027-1031*
- Yan, D.**, see Gorchichko, M., *TNS Jan. 2020 245-252*
- Yang, C.**, see Li, Y., *TNS Nov. 2020 2454-2462*
- Yang, F.**, see Hu, C., *TNS June 2020 1086-1092*
- Yang, F.**, see Xie, B., *TNS June 2020 1066-1075*
- Yang, G.**, see Li, L., *TNS March 2020 508-517*
- Yang, G.**, see Li, L., *TNS Aug. 2020 1826-1834*
- Yang, H.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Yang, J.**, see Wang, L., *TNS July 2020 1360-1364*
- Yang, J.**, see Wang, L., *TNS July 2020 1345-1350*
- Yang, J.**, see Zhu, G., *TNS July 2020 1702-1709*
- Yang, J.**, see Dong, L., *TNS Sept. 2020 2003-2008*
- Yang, L.**, see Lv, P., *TNS Dec. 2020 2501-2510*
- Yao, L.**, Chen, H., Chen, K., Tang, S., and Polychronakos, V., Design and Testing of the Address in Real-Time Data Driver Card for the Micromegas Detector of the ATLAS New Small Wheel Upgrade; *TNS Sept. 2020 2155-2160*
- Ye, L.**, see Wang, X., *TNS May 2020 791-796*
- Ye, S.**, see Jung, S., *TNS Nov. 2020 2311-2320*
- Yokota, Y.**, see Kodama, S., *TNS June 2020 1055-1062*
- Yokota, Y.**, see Ueno, M., *TNS June 2020 1045-1048*
- Yokota, Y.**, see Yoshino, M., *TNS June 2020 999-1002*
- Yokota, Y.**, see Yamaji, A., *TNS June 2020 1027-1031*
- Yoneoka, M.**, see Rafi, J.M., *TNS Dec. 2020 2481-2489*
- Yoshida, M.**, see Nakamura, K.Z., *TNS July 2020 1772-1776*
- Yoshikawa, A.**, see Chewpraditkul, W., *TNS June 2020 910-914*
- Yoshikawa, A.**, see Chewpraditkul, W., *TNS June 2020 904-909*
- Yoshikawa, A.**, Nikl, M., Williams, R.T., Bizarri, G., Fasoli, M., Gundacker, S., Jary, V., Korzhik, M., Kurosawa, S., and Wu, Y., Conference Comments by the Editors; *TNS June 2020 875*
- Yoshikawa, A.**, see Kodama, S., *TNS June 2020 1055-1062*
- Yoshikawa, A.**, see Ueno, M., *TNS June 2020 1045-1048*
- Yoshikawa, A.**, see Yoshino, M., *TNS June 2020 999-1002*
- Yoshikawa, A.**, see Otaka, Y., *TNS June 2020 988-993*
- Yoshikawa, A.**, see Kurosawa, S., *TNS June 2020 994-998*
- Yoshikawa, A.**, see Yamaji, A., *TNS June 2020 1027-1031*
- Yoshikawa, A.**, see Sakthong, O., *TNS Oct. 2020 2295-2299*
- Yoshino, M.**, see Chewpraditkul, W., *TNS June 2020 904-909*
- Yoshino, M.**, see Kodama, S., *TNS June 2020 1055-1062*
- Yoshino, M.**, see Ueno, M., *TNS June 2020 1045-1048*
- Yoshino, M.**, Kamada, K., Shoji, Y., Yokota, Y., Kurosawa, S., Yamaji, A., Ohashi, Y., Sato, H., Fujieda, K., Kataoka, J., and Yoshikawa, A., Development of Gamma-Ray Detector Arrays Consisting of Diced Eu-Doped SrI₂ Scintillator Arrays and TSV-MPPC Arrays; *TNS June 2020 999-1002*
- Yoshino, M.**, see Yamaji, A., *TNS June 2020 1027-1031*
- Yoshioka, T.**, see Kishishita, T., *TNS Sept. 2020 2089-2095*
- Yu, G.**, see Ren, Z., *TNS July 2020 1320-1325*
- Yu, X.**, Song, S., Chen, H., Qu, Y., Zou, H., Zong, Q., Shi, W., Zou, J., Zhong, W., Xiang, H., and Shao, S., Monitoring Deep Dielectric Charging Effects in Space; *TNS April 2020 716-721*
- Yu, X.**, see Dong, L., *TNS Sept. 2020 2003-2008*
- Yuan, Q.**, see Wang, L., *TNS July 2020 1345-1350*
- Yuan, Z.**, see Shu, L., *TNS Nov. 2020 2392-2395*
- Yue, S.**, Lei, Z., Peng, C., Zhong, X., Wang, J., Zhang, Z., En, Y., Wang, Y., and Hu, L., High-Fluence Proton-Induced Degradation on AlGaIn/GaN High-Electron-Mobility Transistors; *TNS July 2020 1339-1344*

Z

- Zakharuk, Z.**, see Sklyarchuk, V., *TNS Nov. 2020 2439-2444*
- Zambelli, N.**, Zanettini, S., Benassi, G., Bettati, A., and Zappettini, A., CdZnTe-Based X-Ray Spectrometer for Absolute Density Determination; *TNS Oct. 2020 2273-2277*
- Zanettini, S.**, see Zambelli, N., *TNS Oct. 2020 2273-2277*
- Zang, J.J.**, see Dai, H.T., *TNS June 2020 956-961*

- Zappettini, A., see Zambelli, N., *TNS Oct. 2020 2273-2277*
- Zarenbin, A.V., see Kashaykin, P.F., *TNS Oct. 2020 2162-2171*
- Zaunick, H., see Orsich, P., *TNS June 2020 952-955*
- Zavorka, L., see Wender, S.A., *TNS June 2020 1114-1117*
- Zeldovich, O., see Lv, P., *TNS Dec. 2020 2501-2510*
- Zen, H., see Ali, K., *TNS Aug. 2020 1976-1984*
- Zeng, C., see Chen, J., *TNS Nov. 2020 2353-2362*
- Zeng, Y., see Wu, M., *TNS April 2020 708-715*
- Zhang, B., see Li, L., *TNS Aug. 2020 1826-1834*
- Zhang, B., see Wang, R., *TNS Sept. 2020 2009-2014*
- Zhang, B., see Li, L., *TNS Sept. 2020 2062-2072*
- Zhang, C., see Wu, M., *TNS April 2020 708-715*
- Zhang, E.X., see Brewer, R.M., *TNS Jan. 2020 108-115*
- Zhang, E.X., see Ryder, L.D., *TNS Jan. 2020 38-43*
- Zhang, E.X., see Ryder, K.L., *TNS Jan. 2020 57-62*
- Zhang, E.X., see Zhao, S.E., *TNS Jan. 2020 253-259*
- Zhang, E.X., see Gorchichko, M., *TNS Jan. 2020 245-252*
- Zhang, E.X., see Bonaldo, S., *TNS Jan. 2020 210-220*
- Zhang, E.X., see Bonaldo, S., *TNS July 2020 1312-1319*
- Zhang, E.X., see Wang, P., *TNS Sept. 2020 2015-2020*
- Zhang, F., see Wang, X., *TNS July 2020 1443-1451*
- Zhang, J., Li, C., Pang, X., Tang, H., Feng, B., Li, D., Kong, L., Zhang, Y., Zhang, Z., Wei, L., and Shuai, L., Development of a 3-D Scintillator Detector for Compton Imaging Based on Laser Engraving; *TNS July 2020 1691-1698*
- Zhang, J., see Hu, Y., *TNS Aug. 2020 1899-1903*
- Zhang, J., see Li, L., *TNS Aug. 2020 1826-1834*
- Zhang, J., see Li, L., *TNS Sept. 2020 2062-2072*
- Zhang, K., see Chen, X., *TNS Aug. 2020 1893-1898*
- Zhang, L., see Hu, C., *TNS June 2020 1014-1019*
- Zhang, L., see Hu, C., *TNS June 2020 1086-1092*
- Zhang, M., see Hu, C., *TNS June 2020 1014-1019*
- Zhang, X., see Wang, L., *TNS July 2020 1360-1364*
- Zhang, X., see Ren, Z., *TNS July 2020 1320-1325*
- Zhang, X., see Wang, L., *TNS July 2020 1345-1350*
- Zhang, X., see Cai, Y., *TNS Aug. 2020 1861-1868*
- Zhang, Y., see Zhang, J., *TNS July 2020 1691-1698*
- Zhang, Y., see Wei, Y., *TNS June 2020 939-945*
- Zhang, Y., see Zhu, G., *TNS July 2020 1702-1709*
- Zhang, Y.L., see Dai, H.T., *TNS June 2020 956-961*
- Zhang, Z., see Wei, Q., *TNS Feb. 2020 450-454*
- Zhang, Z., see Zhang, J., *TNS July 2020 1691-1698*
- Zhang, Z., see Yue, S., *TNS July 2020 1339-1344*
- Zhang, Z., see Wei, Y., *TNS June 2020 939-945*
- Zhang, Z., see Dong, Z., *TNS Aug. 2020 1780-1790*
- Zhang, Z., see Chen, X., *TNS Aug. 2020 1893-1898*
- Zhang, Z., Djahanshahi, H., Gu, C., Patel, M., and Chen, L., Single-Event Effects Characterization of LC-VCO PLLs in a 28-nm CMOS Technology; *TNS Sept. 2020 2042-2050*
- Zhang, Z., see Bi, D., *TNS Nov. 2020 2337-2344*
- Zhang, Z.Y., see Dai, H.T., *TNS June 2020 956-961*
- Zhao, C., see Wei, Y., *TNS June 2020 939-945*
- Zhao, C., see Dai, H.T., *TNS June 2020 956-961*
- Zhao, F., see Wang, L., *TNS July 2020 1345-1350*
- Zhao, J., see Liu, Z., *TNS Aug. 2020 1904-1911*
- Zhao, J., see Lv, P., *TNS Dec. 2020 2501-2510*
- Zhao, K., see Shu, L., *TNS July 2020 1390-1394*
- Zhao, K., see Shu, L., *TNS June 2020 1133-1138*
- Zhao, L., see Fan, Y., *TNS Oct. 2020 2246-2254*
- Zhao, P., see Cai, C., *TNS Jan. 2020 374-381*
- Zhao, S.E., Bonaldo, S., Wang, P., Zhang, E.X., Waldron, N., Collaert, N., Putcha, V., Linten, D., Gerardin, S., Paccagnella, A., Schrimpf, R.D., Reed, R.A., and Fleetwood, D.M., Total-Ionizing-Dose Effects on InGaAs Fin-FETs With Modified Gate-stack; *TNS Jan. 2020 253-259*
- Zhao, S.E., see Gorchichko, M., *TNS Jan. 2020 245-252*
- Zhao, S.E., see Bonaldo, S., *TNS Jan. 2020 210-220*
- Zhao, S.E., see Bonaldo, S., *TNS July 2020 1312-1319*
- Zhao, W., see Lu, B., *TNS June 2020 1175-1184*
- Zhao, Y., see Ryder, K.L., *TNS Jan. 2020 57-62*
- Zhao, Y., see Shu, L., *TNS July 2020 1390-1394*
- Zhao, Y., see Wei, Y., *TNS June 2020 939-945*
- Zhao, Y., see Shu, L., *TNS June 2020 1133-1138*
- Zhao, Y., see Shu, L., *TNS Nov. 2020 2392-2395*
- Zhao, Y.Z., see Dai, H.T., *TNS June 2020 956-961*
- Zheng, Y., see Zhu, G., *TNS July 2020 1702-1709*
- Zhidkov, N.M., see Sotskov, D.I., *TNS Nov. 2020 2396-2404*
- Zhong, W., see Yu, X., *TNS April 2020 716-721*
- Zhong, X., see Yue, S., *TNS July 2020 1339-1344*
- Zhou, D., see Cai, Y., *TNS Aug. 2020 1861-1868*
- Zhou, M., see Wang, X., *TNS May 2020 791-796*
- Zhou, Q., see Liu, Z., *TNS Aug. 2020 1904-1911*
- Zhou, X., see Shu, L., *TNS July 2020 1390-1394*
- Zhou, X., see Shu, L., *TNS June 2020 1133-1138*
- Zhou, X., see Wang, R., *TNS Sept. 2020 2009-2014*
- Zhou, X., see Shu, L., *TNS Nov. 2020 2392-2395*
- Zhou, Y., see Lu, B., *TNS June 2020 1175-1184*
- Zhou, Y., see Lv, P., *TNS Dec. 2020 2501-2510*
- Zhu, B.X., see Jun, B., *TNS July 2020 1629-1636*
- Zhu, G., Wu, J., Chen, X., Yang, J., Liu, J., Shen, G., Du, Z., Zhang, Y., Meng, J., Li, L., Zheng, Y., and Tian, R., Longitudinal and Transverse Measurement to Evaluate the Beam Impedance on a Ceramic Ring-Loaded Thin-Wall Vacuum Chamber in BRING at HIAF; *TNS July 2020 1702-1709*
- Zhu, H., see Wang, L., *TNS July 2020 1360-1364*
- Zhu, H., see Wang, L., *TNS July 2020 1345-1350*
- Zhu, H., see Bi, D., *TNS Nov. 2020 2337-2344*
- Zhu, J., see Li, Y., *TNS Dec. 2020 2474-2480*
- Zhu, R., see Hu, C., *TNS June 2020 1014-1019*
- Zhu, R., see Hu, C., *TNS June 2020 1086-1092*
- Zhu, R.Y., see Atanov, N., *TNS June 2020 978-982*
- Zhu, Y., see Xie, B., *TNS June 2020 1066-1075*
- Zhu, Z., see He, N., *TNS Jan. 2020 400-404*
- Ziegler, J., see Pritchard, K., *TNS Jan. 2020 414-421*
- Ziegler, T., see Lv, P., *TNS Dec. 2020 2501-2510*
- Ziemann, T., see Martinella, C., *TNS July 2020 1381-1389*
- Zimmermann, L., see Tzintzarov, G.N., *TNS Jan. 2020 260-267*
- Zoglauer, A., see Bandstra, M.S., *TNS May 2020 777-790*
- Zong, Q., see Yu, X., *TNS April 2020 716-721*
- Zorenko, T., see Kurosawa, S., *TNS June 2020 994-998*
- Zorenko, Y., see Kurosawa, S., *TNS June 2020 994-998*
- Zorn, C.J., see Smith, J.A., *TNS May 2020 797-804*
- Zou, H., see Yu, X., *TNS April 2020 716-721*
- Zou, J., see Yu, X., *TNS April 2020 716-721*
- Zou, S., see Bi, D., *TNS Nov. 2020 2337-2344*
- Zuo, Y., see Li, Y., *TNS Dec. 2020 2474-2480*

SUBJECT INDEX

Numeric

1/f noise

- Ionizing-Radiation Response and Low-Frequency Noise of 28-nm MOS-FETs at Ultrahigh Doses. *Bonaldo, S., +, TNS July 2020 1302-1311*
- Total-Ionizing-Dose Effects, Border Traps, and 1/f Noise in Emerging MOS Technologies. *Fleetwood, D.M., TNS July 2020 1216-1240*

II-VI semiconductors

- Colloidal Quantum Dot-Doped Optical Fibers for Scintillation Dosimetry. *Whittaker, C., +, TNS June 2020 1040-1044*
- Comparison of Zr, Bi, Ti, and Ga as Metal Contacts in Inorganic Perovskite CsPbBr₃ Gamma-Ray Detector. *Pan, L., +, TNS Oct. 2020 2255-2262*
- Effect of the Electric Field Strength on the Energy Resolution of Cr/CdTe/Pt Detectors. *Sklyarchuk, V., +, TNS Nov. 2020 2439-2444*

III-V semiconductors

- In Situ* Deep-Level Transient Spectroscopy and Dark Current Measurements of Proton-Irradiated InGaAs Photodiodes. *Nelson, G.T.*, +, *TNS Sept. 2020 2051-2061*
- A Photomultiplier With an AlGaIn Photocathode and Microchannel Plates for BaF₂ Scintillator Detectors in Particle Physics. *Atanov, N.*, +, *TNS July 2020 1760-1764*
- Atmospheric Neutron Radiation Response of III-V Binary Compound Semiconductors. *Autran, J.*, +, *TNS July 2020 1428-1435*
- Comparison of X-Ray and Proton Irradiation Effects on the Characteristics of InGaN/GaN Multiple Quantum Wells Light-Emitting Diodes. *Wang, L.*, +, *TNS July 2020 1345-1350*
- COTS Optocoupler Radiation Qualification Process for LHC Applications Based on Mixed-Field Irradiations. *Ferraro, R.*, +, *TNS July 2020 1395-1403*
- Displacement Damage Effects in InGaAs Photodiodes due to Electron, Proton, and Neutron Irradiations. *Nuns, T.*, +, *TNS July 2020 1263-1272*
- High-Fluence Proton-Induced Degradation on AlGaIn/GaN High-Electron-Mobility Transistors. *Yue, S.*, +, *TNS July 2020 1339-1344*
- Mechanism Analysis of Proton Irradiation-Induced Increase of 3-dB Bandwidth of GaN-Based Microlight-Emitting Diodes for Space Light Communication. *Wang, L.*, +, *TNS July 2020 1360-1364*
- Modeling Photocathode Performance Using MedeA-VASP Simulation Software. *Williams, J.O.D.*, +, *TNS Sept. 2020 1987-1992*
- Optical Properties of InGaN/GaN Multiple Quantum Well Structures Grown on GaN and Sapphire Substrates. *Jary, V.*, +, *TNS June 2020 974-977*
- Photocurrent From Single Collision 14-MeV Neutrons in GaN and GaAs. *Jasica, M.J.*, +, *TNS Jan. 2020 221-227*
- Total-Ionizing-Dose Effects and Low-Frequency Noise in 16-nm InGaAs FinFETs With HfO₂/Al₂O₃ Dielectrics. *Bonaldo, S.*, +, *TNS Jan. 2020 210-220*
- Total-Ionizing-Dose Effects in InGaAs MOSFETs With High-*k* Gate Dielectrics and InP Substrates. *Bonaldo, S.*, +, *TNS July 2020 1312-1319*
- Total-Ionizing-Dose Effects on InGaAs FinFETs With Modified Gate-stack. *Zhao, S.E.*, +, *TNS Jan. 2020 253-259*
- Total-Ionizing-Dose Effects, Border Traps, and 1/f Noise in Emerging MOS Technologies. *Fleetwood, D.M.*, *TNS July 2020 1216-1240*

IV-VI semiconductors

- Colloidal Quantum Dot-Doped Optical Fibers for Scintillation Dosimetry. *Whittaker, C.*, +, *TNS June 2020 1040-1044*

A**Absorption**

- Development of a Position-Sensitive 4 π Compton Camera Based on a Single Segmented Scintillator. *Lee, H.*, +, *TNS Dec. 2020 2511-2522*

Absorption coefficients

- Modeling Photocathode Performance Using MedeA-VASP Simulation Software. *Williams, J.O.D.*, +, *TNS Sept. 2020 1987-1992*
- Scintillation Properties of β -Ga₂O₃ Single Crystal Excited by α -Ray. *He, N.*, +, *TNS Jan. 2020 400-404*

Accelerator cavities

- Continuous Wave Operation of Superconducting Accelerating Cavities With High Loaded Quality Factor. *Cichalewski, W.*, +, *TNS Sept. 2020 2119-2127*
- Design of Electromagnetic Bandgap Cavities for High-Gradient On-Axis Coupled-Cavity Linear Accelerators. *Laneve, D.*, +, *TNS May 2020 768-776*
- Design Process for Synchrotron RF Cavities Loaded With Magnetic Ring Cores. *Klingbeil, H.*, +, *TNS Jan. 2020 361-368*

Accelerator control systems

- Results on FPGA-Based High-Power Tube Amplifier Linearization at DESY. *Bellandi, A.*, +, *TNS May 2020 762-767*

Accelerator magnets

- Radiation Environment in the LHC Arc Sections During Run 2 and Future HL-LHC Operations. *Bilko, K.*, +, *TNS July 2020 1682-1690*

Accelerator RF systems

- A 150-kW Pulse Solid-State Amplifier for Radio Frequency Quadrupole Application. *Jain, A.*, +, *TNS Nov. 2020 2303-2310*
- Continuous Wave Operation of Superconducting Accelerating Cavities With High Loaded Quality Factor. *Cichalewski, W.*, +, *TNS Sept. 2020 2119-2127*
- Design of Electromagnetic Bandgap Cavities for High-Gradient On-Axis Coupled-Cavity Linear Accelerators. *Laneve, D.*, +, *TNS May 2020 768-776*
- Design Process for Synchrotron RF Cavities Loaded With Magnetic Ring Cores. *Klingbeil, H.*, +, *TNS Jan. 2020 361-368*
- Results on FPGA-Based High-Power Tube Amplifier Linearization at DESY. *Bellandi, A.*, +, *TNS May 2020 762-767*

Accident prevention

- Radiation-Hardened Sensor Interface Circuit for Monitoring Severe Accidents in Nuclear Power Plants. *Jeon, H.*, +, *TNS July 2020 1738-1745*

Accidents

- Corrections to "Irradiation Tests of Optical Fibers and Cables Devoted to Corium Monitoring in Case of a Severe Accident in a Nuclear Power Plant". *Cheymol, G.*, +, *TNS June 2020 1195*

Adaptive filters

- Least Mean Squares Filters Suppressing the Radio-Frequency Interference in AERA Cosmic Ray Radio Detection. *Szadkowski, Z.*, *TNS Jan. 2020 405-413*

Adaptive optics

- Corrections to "Irradiation Tests of Optical Fibers and Cables Devoted to Corium Monitoring in Case of a Severe Accident in a Nuclear Power Plant". *Cheymol, G.*, +, *TNS June 2020 1195*

Aerospace components

- Orbital Equivalence of Terrestrial Radiation Tolerance Experiments. *Logan, J.V.*, +, *TNS Nov. 2020 2382-2391*

Aerospace instrumentation

- Charging Monitor Aboard the Geostationary Satellite GK2A at 128.2° E Longitude. *Woo, J.*, +, *TNS April 2020 740-745*
- How Much Do Solar Cycle Variations Impact Long-Term Effect Predictions at LEO?. *Bourdarie, S.*, +, *TNS Oct. 2020 2196-2202*

Aerospace materials

- Orbital Equivalence of Terrestrial Radiation Tolerance Experiments. *Logan, J.V.*, +, *TNS Nov. 2020 2382-2391*

Albedo

- Study of Secondary Scattering/Albedo Neutron Fields and Their Impacts on SER as Function of Scene Topologies. *Hubert, G.*, +, *TNS Jan. 2020 201-209*

Alpha-particle detection

- Development of a Gd₂Si₂O₇ (GPS) Scintillator-Based Alpha Imaging Detector for Rapid Plutonium Detection in High-Radon Environments. *Morishita, Y.*, +, *TNS Oct. 2020 2203-2208*
- On-Chip Total Ionizing Dose Digital Monitor in Fully Depleted SOI Technologies. *Abouzeid, F.*, +, *TNS July 2020 1326-1331*

Alpha-particle effects

- Crystal Growth and Scintillation Properties of Carbazole for Neutron Detection. *Yamaji, A.*, +, *TNS June 2020 1027-1031*

Alumina

- Total-Ionizing-Dose Effects on InGaAs FinFETs With Modified Gate-stack. *Zhao, S.E.*, +, *TNS Jan. 2020 253-259*

Aluminosilicate glasses

- Radiation Effects on WDM and DWDM Architectures of Pre-amplifier and Boost-Amplifier. *Aubry, M.*, +, *TNS Jan. 2020 278-283*

Aluminum

- Combined Temperature and Radiation Effects on Radiation-Sensitive Single-Mode Optical Fibers. *Campanella, C.*, +, *TNS July 2020 1643-1649*
- Radiation Resistance of Single-Mode Optical Fibers at $\lambda = 1.55 \mu\text{m}$ Under Irradiation at IVG.1M Nuclear Reactor. *Kashaykin, P.F.*, +, *TNS Oct. 2020 2162-2171*
- Steady-State X-Ray Radiation-Induced Attenuation in Canonical Optical Fibers. *De Michele, V.*, +, *TNS July 2020 1650-1657*

Aluminum compounds

- A Photomultiplier With an AlGaIn Photocathode and Microchannel Plates for BaF₂ Scintillator Detectors in Particle Physics. *Atanov, N.*, +, *TNS July 2020 1760-1764*
- Atmospheric Neutron Radiation Response of III–V Binary Compound Semiconductors. *Autran, J.*, +, *TNS July 2020 1428-1435*
- Bulk Single Crystal Growth of W Co-Doped Ce:Gd₃Ga₃Al₂O₁₂ by Czochralski Method. *Ueno, M.*, +, *TNS June 2020 1045-1048*
- COTS Optocoupler Radiation Qualification Process for LHC Applications Based on Mixed-Field Irradiations. *Ferraro, R.*, +, *TNS July 2020 1395-1403*
- High-Fluence Proton-Induced Degradation on AlGaIn/GaN High-Electron-Mobility Transistors. *Yue, S.*, +, *TNS July 2020 1339-1344*
- Irradiation Tests of Optical Fibers and Cables Devoted to Corium Monitoring in Case of a Severe Accident in a Nuclear Power Plant. *Cheyamol, G.*, +, *TNS April 2020 669-678*
- Luminescence and Scintillation Properties of Mg²⁺-Codoped Lu_{0.6}Gd_{2.4}Al₂Ga₃O₁₂:Ce Single Crystal. *Chewpraditkul, W.*, +, *TNS June 2020 904-909*
- Scintillation Properties of Tetrafluoroaluminate Crystal. *Daniel, D.J.*, +, *TNS June 2020 898-903*
- Total-Ionizing-Dose Effects and Low-Frequency Noise in 16-nm InGaAs FinFETs With HfO₂/Al₂O₃ Dielectrics. *Bonaldo, S.*, +, *TNS Jan. 2020 210-220*
- Total-Ionizing-Dose Effects, Border Traps, and 1/f Noise in Emerging MOS Technologies. *Fleetwood, D.M.*, *TNS July 2020 1216-1240*

Americium

- Performance of Perovskite CsPbBr₃ Single Crystal Detector for Gamma-Ray Detection. *Pan, L.*, +, *TNS Feb. 2020 443-449*

Americium compounds

- Evaluation of an Operational Concept for Improving Radiation Tolerance of Single-Photon Avalanche Diode (SPAD) Arrays. *Smith, J.A.*, +, *TNS May 2020 797-804*

Amorphous semiconductors

- Effects of High-Dose X-Ray Irradiation on the Hole Lifetime in Vacuum-Deposited Stabilized a-Se Photoconductive Films: Implications to the Quality Control of a-Se Used in X-Ray Detectors. *Simonson, B.*, +, *TNS Nov. 2020 2445-2453*

Amplifiers

- A 4-MHz, 256-Channel Readout ASIC for Column-Parallel CCDs With 78.7-dB Dynamic Range. *Grace, C.R.*, +, *TNS May 2020 823-831*
- Design and Experimental Validation of an Integrated Multichannel Charge Amplifier for Solid-State Detectors With Innovative Spectroscopic Range Booster. *Capra, S.*, +, *TNS Aug. 2020 1877-1884*
- Performance Assessment of Amplification and Discrimination Electronic Devices for Passive Neutron Measurements. *Ben Mosbah, M.*, +, *TNS April 2020 662-668*
- Total Dose Effects on Negative and Positive Low-Dropout Linear Regulators. *Privat, A.*, +, *TNS July 2020 1332-1338*

Analog-digital conversion

- A 4-MHz, 256-Channel Readout ASIC for Column-Parallel CCDs With 78.7-dB Dynamic Range. *Grace, C.R.*, +, *TNS May 2020 823-831*
- Design and Characterization of the CLICTD Pixelated Monolithic Sensor Chip. *Kremastiotis, I.*, +, *TNS Oct. 2020 2263-2272*
- Radiation-Hardened Sensor Interface Circuit for Monitoring Severe Accidents in Nuclear Power Plants. *Jeon, H.*, +, *TNS July 2020 1738-1745*
- Reducing Soft Error Rate of SoCs Analog-to-Digital Interfaces With Design Diversity Redundancy. *Gonzalez, C.J.*, +, *TNS March 2020 518-524*
- Research and Verification on Real-Time Interpolated Timing Algorithm Based on Waveform Digitization. *Fan, Y.*, +, *TNS Oct. 2020 2246-2254*
- Single-Event Effects in Pinned Photodiode CMOS Image Sensors: SET and SEL. *Cai, Y.*, +, *TNS Aug. 2020 1861-1868*

Analytical models

- A Special Total-Ionizing-Dose-Induced Short Channel Effect in Thin-Film PDSOI Technology: Phenomena, Analyses, and Models. *Bi, D.*, +, *TNS Nov. 2020 2337-2344*

Annealing

- In Situ* Deep-Level Transient Spectroscopy and Dark Current Measurements of Proton-Irradiated InGaAs Photodiodes. *Nelson, G.T.*, +, *TNS Sept. 2020 2051-2061*
- Annealing Effects on Radiation-Hardened CMOS Image Sensors Exposed to Ultrahigh Total Ionizing Doses. *Dewitte, H.*, +, *TNS July 2020 1284-1292*
- Comparison of X-Ray and Electron Radiation Effects on Dark Current Non-Uniformity and Fluctuations in CMOS Image Sensors. *Le Roch, A.*, +, *TNS Jan. 2020 268-277*
- Displacement Damage Effects in InGaAs Photodiodes due to Electron, Proton, and Neutron Irradiations. *Nuns, T.*, +, *TNS July 2020 1263-1272*
- Evolution of Ionization-Induced Defects in GLPNP Bipolar Transistors at Different Temperatures. *Dong, L.*, +, *TNS Sept. 2020 2003-2008*
- Influence of Annealing Temperature on the Performance of Lu₂O₃:Eu³⁺ Nanowire Arrays Synthesized by Sol–Gel Method Using AAO Template. *Hu, Y.*, +, *TNS Aug. 2020 1899-1903*
- Ionizing-Radiation Response and Low-Frequency Noise of 28-nm MOSFETs at Ultrahigh Doses. *Bonaldo, S.*, +, *TNS July 2020 1302-1311*
- Phosphorus Versus Arsenic: Role of the Photodiode Doping Element in CMOS Image Sensor Radiation-Induced Dark Current and Random Telegraph Signal. *Le Roch, A.*, +, *TNS July 2020 1241-1250*
- Response of Waveguide-Integrated Germanium-on-Silicon p-i-n Photodiodes to Neutron Displacement Damage. *Goley, P.S.*, +, *TNS Jan. 2020 296-304*
- Scintillation Properties of β -Ga₂O₃ Single Crystal Excited by α -Ray. *He, N.*, +, *TNS Jan. 2020 400-404*
- Total Ionizing Dose Effects in 30-V Split-Gate Trench VDMOS. *Wang, R.*, +, *TNS Sept. 2020 2009-2014*
- Total-Ionizing-Dose Effects and Low-Frequency Noise in 16-nm InGaAs FinFETs With HfO₂/Al₂O₃ Dielectrics. *Bonaldo, S.*, +, *TNS Jan. 2020 210-220*

Antireflection coatings

- Comparison of Back-Thinned Detector Ultraviolet Quantum Efficiency for Two Commercially Available Passivation Treatments. *Heymes, J.*, +, *TNS Aug. 2020 1962-1967*
- Radiation Resistance of Single-Mode Optical Fibers at $\lambda = 1.55 \mu\text{m}$ Under Irradiation at IVG.1M Nuclear Reactor. *Kashaykin, P.F.*, +, *TNS Oct. 2020 2162-2171*

Application specific integrated circuits

- A 4-MHz, 256-Channel Readout ASIC for Column-Parallel CCDs With 78.7-dB Dynamic Range. *Grace, C.R.*, +, *TNS May 2020 823-831*
- Design and Characterizations of the Radiation-Hardened XCR4C ASIC for X-Ray CCDs for Space Astronomical Applications. *Lu, B.*, +, *TNS June 2020 1175-1184*
- Design and Testing of the Address in Real-Time Data Driver Card for the Micromegas Detector of the ATLAS New Small Wheel Upgrade. *Yao, L.*, +, *TNS Sept. 2020 2155-2160*
- Development of a High-Rate Front-End ASIC for X-Ray Spectroscopy and Diffraction Applications. *Vernon, E.*, +, *TNS April 2020 752-759*
- Phase I Upgrade of the Readout System of the Vertex Detector at the LHCb Experiment. *Fernandez Prieto, A.*, +, *TNS April 2020 732-739*
- TERA: Throughput-Enhanced Readout ASIC for High-Rate Energy-Dispersive X-Ray Detection. *Hafizh, I.*, +, *TNS July 2020 1746-1759*

Arsenic

- Phosphorus Versus Arsenic: Role of the Photodiode Doping Element in CMOS Image Sensor Radiation-Induced Dark Current and Random Telegraph Signal. *Le Roch, A.*, +, *TNS July 2020 1241-1250*

Artificial satellites

- Analysis of the Drift of the South Atlantic Anomaly From ICARE and SEM-2 Flight Data. *Aubry, M.*, +, *TNS July 2020 1251-1255*
- Charging Monitor Aboard the Geostationary Satellite GK2A at 128.2° E Longitude. *Woo, J.*, +, *TNS April 2020 740-745*
- How Much Do Solar Cycle Variations Impact Long-Term Effect Predictions at LEO?. *Bourdarie, S.*, +, *TNS Oct. 2020 2196-2202*
- Monitoring Deep Dielectric Charging Effects in Space. *Yu, X.*, +, *TNS April 2020 716-721*

Astronomical instruments

- Charging Monitor Aboard the Geostationary Satellite GK2A at 128.2° E Longitude. *Woo, J.*, +, *TNS April 2020 740-745*
- Measurement of the Anisotropic Response of the ZnWO₄ Crystal for Developing the Direction-Sensitive Dark Matter Detector. *Ichimura, K.*, +, *TNS June 2020 894-897*
- Orbital Equivalence of Terrestrial Radiation Tolerance Experiments. *Logan, J.V.*, +, *TNS Nov. 2020 2382-2391*
- Response of the BGO Calorimeter to Cosmic-Ray Nuclei in the DAMPE Experiment on Orbit. *Dai, H.T.*, +, *TNS June 2020 956-961*
- Sensitivity of Silicon Photomultipliers to Direct Gamma Ray Irradiation. *Lavelle, C.M.*, +, *TNS Jan. 2020 389-399*

Atomic beams

- Design and Analytical Evaluation of a New Ion Collection Geometry for Improvement in Quantity and Quality of Product During Laser Isotope Separation. *Dikshit, B.*, +, *TNS Dec. 2020 2465-2473*

Atomic layer deposition

- Design and Analytical Evaluation of a New Ion Collection Geometry for Improvement in Quantity and Quality of Product During Laser Isotope Separation. *Dikshit, B.*, +, *TNS Dec. 2020 2465-2473*

Attenuation measurement

- Measured Energy-Dependent Neutron Attenuation Through the Stacked Printed Circuit Boards. *Wender, S.A.*, +, *TNS June 2020 1114-1117*

Autonomous aerial vehicles

- Unmanned Radiation-Monitoring System. *Cerba, S.*, +, *TNS April 2020 636-643*

Avalanche diodes

- Evaluation of an Operational Concept for Improving Radiation Tolerance of Single-Photon Avalanche Diode (SPAD) Arrays. *Smith, J.A.*, +, *TNS May 2020 797-804*

Avalanche photodiodes

- DCR Performance in Neutron-Irradiated CMOS SPADs From 150- to 180-nm Technologies. *Ratti, L.*, +, *TNS July 2020 1293-1301*

Avionics

- Thermal Neutron-Induced SEUs in the LHC Accelerator Environment. *Cecchetto, M.*, +, *TNS July 2020 1412-1420*

Awards

- 2019 IEEE Nuclear and Space Radiation Effects Conference Awards: Comments by the Chairman. *Poivey, C.*, *TNS Jan. 2020 9-10*
- Outstanding Conference Paper Award: 2019 IEEE Nuclear and Space Radiation Effects Conference. *TNS Jan. 2020 11-13*

B**Barium compounds**

- F-Centers in BaBrI Single Crystal. *Shendrik, R.*, +, *TNS June 2020 946-951*
- Study on the Time Response of a Barium Fluoride Scintillation Detector for Fast Pulse Radiation Detection. *Chen, X.*, +, *TNS Aug. 2020 1893-1898*
- Ultrafast Radiative Relaxation Processes in Multication Cross-Luminescence Materials. *Saaring, J.*, +, *TNS June 2020 1009-1013*

Baryon-baryon interactions

- GEANT4 Model for Heavy Baryon/Meson–Nucleon Cross Sections. *Grichine, V.M.*, *TNS Sept. 2020 1993-1995*

Bayes methods

- Gamma-Ray Source Detection Under Occlusions and Position Errors in Cluttered Urban Scenes. *Miller, K.*, +, *TNS June 2020 1185-1194*

Beam handling techniques

- Longitudinal Direct Ionization Impact of Heavy Ions on See Testing for Ultrahigh Energies. *Wyrwoll, V.*, +, *TNS July 2020 1530-1539*
- Measurement of Single-Event Upsets in 65-nm SRAMs Under Irradiation of Spallation Neutrons at J-PARC MLF. *Kuroda, J.*, +, *TNS July 2020 1599-1605*

BiCMOS integrated circuits

- Tradeoffs Between RF Performance and SET Robustness in Low-Noise Amplifiers in a Complementary SiGe BiCMOS Platform. *Ildelfonso, A.*, +, *TNS July 2020 1521-1529*

Biomedical equipment

- Implementation of Optical-Fiber Postmortem Dose Measurements: A Proof of Concept. *Di Francesca, D.*, +, *TNS Jan. 2020 140-145*

Biomedical materials

- Luminescent Nanocomposites for Biomedical Applications. *Popovich, K.*, +, *TNS June 2020 962-968*

Biomedical optical imaging

- Luminescent Nanocomposites for Biomedical Applications. *Popovich, K.*, +, *TNS June 2020 962-968*

Bipolar integrated circuits

- A Radiation-Hardened Dual-Direction SCR Based on LDMOS for ESD Protection in the Extreme Radiation Environment. *Wu, M.*, +, *TNS April 2020 708-715*

Bipolar MMIC

- Tradeoffs Between RF Performance and SET Robustness in Low-Noise Amplifiers in a Complementary SiGe BiCMOS Platform. *Ildelfonso, A.*, +, *TNS July 2020 1521-1529*

Bipolar transistors

- Cryogenic Bandgap Reference Circuit With Compact Model Parameter Extraction of MOSFETs and BJTs for HPGe Detectors. *Liu, F.*, +, *TNS Oct. 2020 2209-2216*
- Evolution of Ionization-Induced Defects in GLPNP Bipolar Transistors at Different Temperatures. *Dong, L.*, +, *TNS Sept. 2020 2003-2008*
- Improved Model for Ionization-Induced Surface Recombination Current in p-n-p BJTs. *Li, L.*, +, *TNS Aug. 2020 1826-1834*

Bismuth

- Performance of High Stopping Power Bismuth-Loaded Plastic Scintillators for Radiation Portal Monitors. *O'Neal, S.*, +, *TNS April 2020 746-751*

Bonds (chemical)

- Comparison of X-Ray and Proton Irradiation Effects on the Characteristics of InGaN/GaN Multiple Quantum Wells Light-Emitting Diodes. *Wang, L.*, +, *TNS July 2020 1345-1350*
- Luminescent Nanocomposites for Biomedical Applications. *Popovich, K.*, +, *TNS June 2020 962-968*

Boron

- Thermal Neutron-Induced SEUs in the LHC Accelerator Environment. *Cecchetto, M.*, +, *TNS July 2020 1412-1420*
- Thermal Neutron-Induced Single-Event Upsets in Microcontrollers Containing Boron-10. *Auden, E.C.*, +, *TNS Jan. 2020 29-37*

Bragg gratings

- Radiation Response of Distributed Feedback Bragg Gratings for Space Applications. *Morana, A.*, +, *TNS Jan. 2020 284-288*
- Radiation-Response of Fiber Bragg Gratings at Low Temperatures. *Morana, A.*, +, *TNS July 2020 1637-1642*

Brain

- The Impact of Proton-Induced Single Events on Image Classification in a Neuromorphic Computing Architecture. *Brewer, R.M.*, +, *TNS Jan. 2020 108-115*

Bremsstrahlung

- Detector Upgrade for Fast MeV X-Ray Imaging for Severe Accidents Experiments. *Tisseur, D.*, +, *TNS July 2020 1715-1721*

Buchanan, Bobby L.

- In Memoriam Bobby L. Buchanan (1931–2018). *TNS Jan. 2020 14*

Buffer layers

- Total-Ionizing-Dose Effects and Low-Frequency Noise in 16-nm InGaAs FinFETs With HfO₂/Al₂O₃ Dielectrics. *Bonaldo, S.*, +, *TNS Jan. 2020 210-220*

C**Cache storage**

- Applying Compiler-Automated Software Fault Tolerance to Multiple Processor Platforms. *James, B.*, +, *TNS Jan. 2020 321-327*

Cadmium alloys

- Artifacts in High-Energy Compton Imaging With 3-D Position-Sensitive CdZnTe. *Shy, D.*, +, *TNS Aug. 2020 1920-1928*

Cadmium compounds

- CdZnTe-Based X-Ray Spectrometer for Absolute Density Determination. *Zambelli, N.*, +, *TNS Oct. 2020 2273-2277*
- Colloidal Quantum Dot-Doped Optical Fibers for Scintillation Dosimetry. *Whittaker, C.*, +, *TNS June 2020 1040-1044*

Comparison of Zr, Bi, Ti, and Ga as Metal Contacts in Inorganic Perovskite CsPbBr₃ Gamma-Ray Detector. *Pan, L., +, TNS Oct. 2020 2255-2262*

Effect of the Electric Field Strength on the Energy Resolution of Cr/CdTe/Pt Detectors. *Sklyarchuk, V., +, TNS Nov. 2020 2439-2444*

Growth of Large-Area Cd_{0.9}Zn_{0.1}Te Single Crystals and Fabrication of Pixelated Guard-Ring Detector for Room-Temperature γ -Ray Detection. *Sajjad, M., +, TNS Aug. 2020 1946-1951*

Time-Encoded Gamma-Ray Imaging Using a 3-D Position-Sensitive CdZnTe Detector Array. *Brown, S.T., +, TNS Feb. 2020 464-472*

Calibration

Application of Binocular Stereo Vision in Radioactive Source Image Reconstruction and Multimodal Imaging Fusion. *Li, Y., +, TNS Nov. 2020 2454-2462*

CdZnTe-Based X-Ray Spectrometer for Absolute Density Determination. *Zambelli, N., +, TNS Oct. 2020 2273-2277*

Design and Performance of Data Acquisition and Control System for the Muon g-2 Laser Calibration. *Mastroianni, S., +, TNS May 2020 832-839*

Development of a 3-D Scintillator Detector for Compton Imaging Based on Laser Engraving. *Zhang, J., +, TNS July 2020 1691-1698*

Front-End Electronics for the SiPM-Readout Gaseous TPC for Neutrinoless Double-Beta Decay Search. *Nakamura, K.Z., +, TNS July 2020 1772-1776*

Modified Texas Convention Method for Fast Neutron Flux Measurements. *Uhlar, R., +, TNS Jan. 2020 382-388*

New SEU Modeling Method for Calibrating Target System to Multiple Radiation Particles. *Caron, P., +, TNS Jan. 2020 44-49*

Phase Drift Compensating RF Link for Femtosecond Synchronization of E-XFEL. *Sikora, D., +, TNS Sept. 2020 2136-2142*

Qualification of a New Differential Calorimeter Configuration Dedicated to Nuclear Heating Rates up to 20 W.g⁻¹. *Volte, A., +, TNS Nov. 2020 2405-2414*

Reducing NaI(Tl) Detector Spectrum Shift by Optimizing Pulse Integration Time. *Wei, Q., +, TNS Feb. 2020 450-454*

Unmanned Radiation-Monitoring System. *Cerba, S., +, TNS April 2020 636-643*

Cameras

Application of Binocular Stereo Vision in Radioactive Source Image Reconstruction and Multimodal Imaging Fusion. *Li, Y., +, TNS Nov. 2020 2454-2462*

Development of a Position-Sensitive 4 π Compton Camera Based on a Single Segmented Scintillator. *Lee, H., +, TNS Dec. 2020 2511-2522*

Failure Analysis of Galaxy S7 Edge Smartphone Using Neutron Radiation. *Bak, G., +, TNS Nov. 2020 2370-2381*

Proximity-Based Sensor Fusion of Depth Cameras and Isotropic Rad-Detectors. *Henderson, K., +, TNS May 2020 840-857*

Capacitance

Impedance and Noise Closed-Form Model of Large-Area Integrated Resistors With High Stray Capacitance to be Used as Feedback Discharge Devices in Charge-Sensitive Preamplifiers for Nuclear Spectroscopy. *Capra, S., TNS April 2020 722-731*

Carrier density

Single-Event Transients in SiGe HBTs Induced by Pulsed X-Ray Microbeam. *Nergui, D., +, TNS Jan. 2020 91-98*

Carrier lifetime

Band Gap Variation and Trap Distribution in Transparent Garnet Scintillator Ceramics. *Wieczorek, H., +, TNS Aug. 2020 1934-1945*

Mechanism Analysis of Proton Irradiation-Induced Increase of 3-dB Bandwidth of GaN-Based Microlight-Emitting Diodes for Space Light Communication. *Wang, L., +, TNS July 2020 1360-1364*

Carrier mobility

Cryogenic Bandgap Reference Circuit With Compact Model Parameter Extraction of MOSFETs and BJTs for HPGc Detectors. *Liu, F., +, TNS Oct. 2020 2209-2216*

High-Fluence Proton-Induced Degradation on AlGaIn/GaN High-Electron-Mobility Transistors. *Yue, S., +, TNS July 2020 1339-1344*

TID Response of Bulk Si PMOS FinFETs: Bias, Fin Width, and Orientation Dependence. *Ren, Z., +, TNS July 2020 1320-1325*

Casting

CsPbBr₃ Thin Films on LYSO:Ce Substrates. *Tomanova, K., +, TNS June 2020 933-938*

Cathodoluminescence

Luminescent Nanocomposites for Biomedical Applications. *Popovich, K., +, TNS June 2020 962-968*

CCD image sensors

Comparison of Back-Thinned Detector Ultraviolet Quantum Efficiency for Two Commercially Available Passivation Treatments. *Heymes, J., +, TNS Aug. 2020 1962-1967*

Gas Scintillation Imager With Capillary Plate. *Sugiyama, H., +, TNS June 2020 1035-1039*

Cellular biophysics

Luminescent Nanocomposites for Biomedical Applications. *Popovich, K., +, TNS June 2020 962-968*

Ceramics

Band Gap Variation and Trap Distribution in Transparent Garnet Scintillator Ceramics. *Wieczorek, H., +, TNS Aug. 2020 1934-1945*

CdZnTe-Based X-Ray Spectrometer for Absolute Density Determination. *Zambelli, N., +, TNS Oct. 2020 2273-2277*

Longitudinal and Transverse Measurement to Evaluate the Beam Impedance on a Ceramic Ring-Loaded Thin-Wall Vacuum Chamber in BRing at HIAF. *Zhu, G., +, TNS July 2020 1702-1709*

Cerium

Advances in High-Resolution Ultrafast Lu₃:Ce Scintillators for Fast Timing Applications. *Marshall, M.S.J., +, TNS June 2020 969-973*

Band Gap Variation and Trap Distribution in Transparent Garnet Scintillator Ceramics. *Wieczorek, H., +, TNS Aug. 2020 1934-1945*

Bulk Single Crystal Growth of W Co-Doped Ce:Gd₃Ga₅Al₂O₁₂ by Czochralski Method. *Ueno, M., +, TNS June 2020 1045-1048*

Composite Scintillators Based on the Films and Crystals of (Lu,Gd,La)₂Si₂O₇ Pyrosilicates. *Kurosawa, S., +, TNS June 2020 994-998*

Investigation of Thermoluminescence Properties of Potential Fibered-OSL Dosimeter Materials. *Benabdesselam, M., +, TNS July 2020 1663-1668*

Light Yield and Timing Characteristics of Lu_{0.8}Gd_{2.2}(Al_{5-x}Gax)O₁₂:Ce,Mg Single Crystals. *Sakthong, O., +, TNS Oct. 2020 2295-2299*

Luminescence and Scintillation Properties of Mg²⁺-Codoped Lu_{0.6}Gd_{2.4}Al₂Ga₃O₁₂:Ce Single Crystal. *Chewpraditkul, W., +, TNS June 2020 904-909*

Luminescent Nanocomposites for Biomedical Applications. *Popovich, K., +, TNS June 2020 962-968*

Optical and Scintillation Properties of Hf⁴⁺ Codoped Sr₁₂:Eu²⁺ Single Crystals. *Wang, S., +, TNS June 2020 876-879*

Optimizing the Sensitivity of a GAGG:Ce-Based Thermal Neutron Detector. *Taggart, M.P., +, TNS April 2020 603-608*

Remote Measurements of X-Rays Dose Rate Using a Cerium-Doped Air-Clad Optical Fiber. *Bahout, J., +, TNS July 2020 1658-1662*

Scintillation Characteristics of Mg²⁺-Codoped Y_{0.8}Gd_{2.2}(Al_{5-x}Gax)O₁₂:Ce Single Crystals. *Chewpraditkul, W., +, TNS June 2020 910-914*

Scintillation Properties and Energy Transfer in (GdY)AlO₃:Ce³⁺ Perovskites With High Gd Content. *Kucera, M., +, TNS June 2020 1049-1054*

Thermal Characterization of Tl₂LiYCl₆:Ce (TLYC). *Watts, M.M., +, TNS March 2020 525-533*

Cerium compounds

Performance Evaluation of Liquinert-Processed CeBr₃ Crystals Coupled With a Multipixel Photon Counter. *Otake, Y., +, TNS June 2020 988-993*

Role of Chemical Substitution in the Photoluminescence Properties of Cerium Samarium Tungstates Ce_(2-x)Sm_x(WO₄)₃ (0 ≤ x ≤ 0.3). *Derraji, K., +, TNS April 2020 568-574*

Cesium compounds

CsPbBr₃ Thin Films on LYSO:Ce Substrates. *Tomanova, K., +, TNS June 2020 933-938*

High-Resolution Thermal Neutron Imaging With ¹⁰Boron/CsI:TI Scintillator Screen. *Miller, S.R., +, TNS Aug. 2020 1929-1933*

Modeling Photocathode Performance Using MedeA-VASP Simulation Software. *Williams, J.O.D., +, TNS Sept. 2020 1987-1992*

Performance of Perovskite CsPbBr₃ Single Crystal Detector for Gamma-Ray Detection. *Pan, L., +, TNS Feb. 2020 443-449*

- Scintillation Properties of Tetrafluoroaluminate Crystal. *Daniel, D.J.*, +, *TNS June 2020 898-903*
- Thermal Neutron Discrimination Using a Novel Phoswich Detector of $Gd_3Ga_3Al_2O_{12}:Ce,B$ and $CsI:Tl$ Single Crystals. *Kalyani, .*, +, *TNS Nov. 2020 2415-2420*
- Charge transfer states**
- Role of Chemical Substitution in the Photoluminescence Properties of Cerium Samarium Tungstates $Ce_{(2-x)}Sm_x(WO_4)_3$ ($0 \leq x \leq 0.3$). *Derraji, K.*, +, *TNS April 2020 568-574*
- Charge-coupled devices**
- A 4-MHz, 256-Channel Readout ASIC for Column-Parallel CCDs With 78.7-dB Dynamic Range. *Grace, C.R.*, +, *TNS May 2020 823-831*
- Design and Characterizations of the Radiation-Hardened XCR4C ASIC for X-Ray CCDs for Space Astronomical Applications. *Lu, B.*, +, *TNS June 2020 1175-1184*
- Simulating Charge Deposition by Cosmic Rays Inside Astronomical Imaging Detectors. *Lucsanyi, D.*, +, *TNS July 2020 1623-1628*
- Chemical vapor deposition**
- Comparison Between Silicon Carbide and Diamond for Thermal Neutron Detection at Room Temperature. *Obratsova, O.*, +, *TNS May 2020 863-871*
- High-Temperature Diamond Detector for Neutron Generator Output Monitoring in Well Logging Applications. *Anniyev, T.*, +, *TNS Aug. 2020 1885-1892*
- Cherenkov counters**
- A Plutonium Mass Uncertainty Assessment Using a Cherenkov-Based Neutron Multiplicity Water Detector. *Asgari, A.*, +, *TNS Nov. 2020 2431-2438*
- Least Mean Squares Filters Suppressing the Radio-Frequency Interference in AERA Cosmic Ray Radio Detection. *Szadkowski, Z.*, *TNS Jan. 2020 405-413*
- Chlorine**
- Effect of the Electric Field Strength on the Energy Resolution of Cr/CdTe/Pt Detectors. *Sklyarchuk, V.*, +, *TNS Nov. 2020 2439-2444*
- Chromium**
- Effect of the Electric Field Strength on the Energy Resolution of Cr/CdTe/Pt Detectors. *Sklyarchuk, V.*, +, *TNS Nov. 2020 2439-2444*
- Circuit noise**
- Impedance and Noise Closed-Form Model of Large-Area Integrated Resistors With High Stray Capacitance to be Used as Feedback Discharge Devices in Charge-Sensitive Preamplifiers for Nuclear Spectroscopy. *Capra, S.*, *TNS April 2020 722-731*
- Clocks**
- Achieving Picosecond-Level Phase Stability in Timing Distribution Systems With Xilinx Ultrascale Transceivers. *Mendes, E.*, +, *TNS March 2020 473-481*
- Clock-Centric Serial Links for the Synchronization of Distributed Readout Systems. *Calvet, D.*, *TNS Aug. 2020 1912-1919*
- CMOS analog integrated circuits**
- Single-Event Upset Responses of Metal-Oxide-Metal Capacitors and Diodes Used in Bulk 65-nm CMOS Analog Circuits. *Xu, R.*, +, *TNS April 2020 698-707*
- CMOS digital integrated circuits**
- A 3-D Simulation-Based Approach to Analyze Heavy Ions-Induced SET on Digital Circuits. *Sterpone, L.*, +, *TNS Sept. 2020 2034-2041*
- CMOS image sensors**
- A 4-MHz, 256-Channel Readout ASIC for Column-Parallel CCDs With 78.7-dB Dynamic Range. *Grace, C.R.*, +, *TNS May 2020 823-831*
- A Radiation-Hardened CMOS Image Sensor With Pixels Exhibiting a Negligibly Small Dark-Level Increase During Ionizing Radiation. *Watanabe, T.*, +, *TNS Aug. 2020 1835-1845*
- Annealing Effects on Radiation-Hardened CMOS Image Sensors Exposed to Ultrahigh Total Ionizing Doses. *Dewitte, H.*, +, *TNS July 2020 1284-1292*
- Comparison of X-Ray and Electron Radiation Effects on Dark Current Non-Uniformity and Fluctuations in CMOS Image Sensors. *Le Roch, A.*, +, *TNS Jan. 2020 268-277*
- Design and Characterization of the CLICTD Pixelated Monolithic Sensor Chip. *Kremastiotis, I.*, +, *TNS Oct. 2020 2263-2272*
- High Displacement Damage Dose Effects in Radiation Hardened CMOS Image Sensors. *Rizzolo, S.*, +, *TNS July 2020 1256-1262*
- Phosphorus Versus Arsenic: Role of the Photodiode Doping Element in CMOS Image Sensor Radiation-Induced Dark Current and Random Telegraph Signal. *Le Roch, A.*, +, *TNS July 2020 1241-1250*
- Proton and Gamma Radiation Effects on a Fully Depleted Pinned Photodiode CMOS Image Sensor. *Meng, X.*, +, *TNS June 2020 1107-1113*
- Single-Event Effects in Pinned Photodiode CMOS Image Sensors: SET and SEL. *Cai, Y.*, +, *TNS Aug. 2020 1861-1868*
- Wavelet Analysis of RTS Noise in CMOS Image Sensors Irradiated With High-Energy Photons. *Hendrickson, B.*, +, *TNS July 2020 1732-1737*
- CMOS integrated circuits**
- A 4-MHz, 256-Channel Readout ASIC for Column-Parallel CCDs With 78.7-dB Dynamic Range. *Grace, C.R.*, +, *TNS May 2020 823-831*
- A Radiation-Hardened Dual-Direction SCR Based on LDMOS for ESD Protection in the Extreme Radiation Environment. *Wu, M.*, +, *TNS April 2020 708-715*
- Assessment of On-Chip Current Sensor for Detection of Thermal-Neutron-Induced Transients. *Possamai Bastos, R.*, +, *TNS July 2020 1404-1411*
- Cryogenic Bandgap Reference Circuit With Compact Model Parameter Extraction of MOSFETs and BJTs for HPGe Detectors. *Liu, F.*, +, *TNS Oct. 2020 2209-2216*
- DCR Performance in Neutron-Irradiated CMOS SPADs From 150- to 180-nm Technologies. *Ratti, L.*, +, *TNS July 2020 1293-1301*
- Design and Characterization of the CLICTD Pixelated Monolithic Sensor Chip. *Kremastiotis, I.*, +, *TNS Oct. 2020 2263-2272*
- Design and Characterizations of the Radiation-Hardened XCR4C ASIC for X-Ray CCDs for Space Astronomical Applications. *Lu, B.*, +, *TNS June 2020 1175-1184*
- DFF Layout Variations in CMOS SOI—Analysis of Hardening by Design Options. *Black, J.D.*, +, *TNS June 2020 1125-1132*
- Ionizing Radiation Effects Spectroscopy for Analysis of Single-Event Transients. *Loveless, T.D.*, +, *TNS Jan. 2020 99-107*
- Low-Energy Protons—Where and Why “Rare Events” Matter. *Rodbell, K.P.*, *TNS July 2020 1204-1215*
- Nonstable Latchups in CMOS ICs Under Pulsed Laser Irradiation. *Shvetsov-Shilovskiy, I.I.*, +, *TNS July 2020 1540-1546*
- Shunt Regulator for the Serial Powering of the ATLAS CMOS Pixel Detector Modules. *Habib, A.*, +, *TNS Feb. 2020 455-463*
- Single-Event Effects Characterization of LC-VCO PLLs in a 28-nm CMOS Technology. *Zhang, Z.*, +, *TNS Sept. 2020 2042-2050*
- SlitT: A Strip-Sensor Readout Chip With Subnanosecond Time Walk for the J-PARC Muon $g - 2$ /EDM Experiment. *Kishishita, T.*, +, *TNS Sept. 2020 2089-2095*
- Spin-Transfer Torque Magnetic Tunnel Junction for Single-Event Effects Mitigation in IC Design. *Coi, O.*, +, *TNS July 2020 1674-1681*
- Temperature-Compensated MOS Dosimeter Fully Integrated in a High-Voltage 0.35 μm CMOS Process. *Carbonetto, S.*, +, *TNS June 2020 1118-1124*
- CMOS logic circuits**
- Understanding the Key Parameter Dependences Influencing the Soft-Error Susceptibility of Standard Combinational Logic. *Pande, N.*, +, *TNS Jan. 2020 116-125*
- CMOS memory circuits**
- Transistor Width Effect on the Power Supply Voltage Dependence of α -SER in CMOS 6T SRAM. *Torrens, G.*, +, *TNS May 2020 811-817*
- Coaxial cables**
- Phase Drift Compensating RF Link for Femtosecond Synchronization of E-XFEL. *Sikora, D.*, +, *TNS Sept. 2020 2136-2142*
- Quantitative Study of Pulsed X-Ray-Induced Electromagnetic Response in Coaxial Cables. *Ribiere, M.*, +, *TNS July 2020 1722-1731*
- Coincidence techniques**
- High-Resolution Gamma Spectrometry of a Plutonium Bearing Waste Drum With High-Energy Reaction-Induced Gamma Rays. *Bottau, V.*, +, *TNS April 2020 575-584*
- Light Yield and Timing Characteristics of $Lu_{0.8}Gd_{0.2}(Al_{5-x}Gax)O_{12}:Ce,Mg$ Single Crystals. *Sakthong, O.*, +, *TNS Oct. 2020 2295-2299*

Collimators

Compton Background Elimination for in Vivo X-Ray Fluorescence Imaging of Gold Nanoparticles Using Convolutional Neural Network. *Jung, S.*, +, *TNS Nov. 2020 2311-2320*

Simulation and Measurements of Collimator Effects in Proton and Neutron Radiation Testing for Single-Event Effects. *Belanger-Champagne, C.*, +, *TNS Jan. 2020 161-168*

Colloids

Colloidal Quantum Dot-Doped Optical Fibers for Scintillation Dosimetry. *Whittaker, C.*, +, *TNS June 2020 1040-1044*

Color centers

Scintillation Properties of β -Ga₂O₃ Single Crystal Excited by α -Ray. *He, N.*, +, *TNS Jan. 2020 400-404*

Stimulated Recovery of the Radiation Damage in Lead Tungstate Crystals. *Orsich, P.*, +, *TNS June 2020 952-955*

Combinational circuits

Empirical Mathematical Model of Microprocessor Sensitivity and Early Prediction to Proton and Neutron Radiation-Induced Soft Errors. *Serrano-Cases, A.*, +, *TNS July 2020 1511-1520*

Understanding the Key Parameter Dependences Influencing the Soft-Error Susceptibility of Standard Combinational Logic. *Pande, N.*, +, *TNS Jan. 2020 116-125*

Combustion

In Situ Gas Monitoring by Fiber-Coupled Raman Spectrometry for H₂-Risk Management in Nuclear Containment During a Severe Nuclear Accident. *Magne, S.*, +, *TNS April 2020 617-624*

Compton effect

Compton Background Elimination for in Vivo X-Ray Fluorescence Imaging of Gold Nanoparticles Using Convolutional Neural Network. *Jung, S.*, +, *TNS Nov. 2020 2311-2320*

Development of a 3-D Scintillator Detector for Compton Imaging Based on Laser Engraving. *Zhang, J.*, +, *TNS July 2020 1691-1698*

Monte Carlo Calculations of the Detection Efficiency of Composite Scintillator Arrays for Fast and Moderated Neutrons, and for Gamma-Ray Spectroscopy. *Derenzo, S.E.*, +, *TNS June 2020 888-893*

Computer network reliability

Reliability Analysis of Ethernet-Based Solutions for Data Transmission in the CERN Radiation Environment. *Gnemmi, G.*, +, *TNS July 2020 1614-1622*

Computer vision

Application of Binocular Stereo Vision in Radioactive Source Image Reconstruction and Multimodal Imaging Fusion. *Li, Y.*, +, *TNS Nov. 2020 2454-2462*

Proximity-Based Sensor Fusion of Depth Cameras and Isotropic Rad-Detectors. *Henderson, K.*, +, *TNS May 2020 840-857*

Computerized tomography

CdZnTe-Based X-Ray Spectrometer for Absolute Density Determination. *Zambelli, N.*, +, *TNS Oct. 2020 2273-2277*

Compton Background Elimination for in Vivo X-Ray Fluorescence Imaging of Gold Nanoparticles Using Convolutional Neural Network. *Jung, S.*, +, *TNS Nov. 2020 2311-2320*

High-Resolution Thermal Neutron Imaging With ¹⁰Boron/CsI:TI Scintillator Screen. *Miller, S.R.*, +, *TNS Aug. 2020 1929-1933*

ROI-Wise Material Decomposition in Spectral Photon-Counting CT. *Xie, B.*, +, *TNS June 2020 1066-1075*

Selective Isotope CT Imaging Based on Nuclear Resonance Fluorescence Transmission Method. *Ali, K.*, +, *TNS Aug. 2020 1976-1984*

Concrete

In Situ Gas Monitoring by Fiber-Coupled Raman Spectrometry for H₂-Risk Management in Nuclear Containment During a Severe Nuclear Accident. *Magne, S.*, +, *TNS April 2020 617-624*

Conduction bands

Band Gap Variation and Trap Distribution in Transparent Garnet Scintillator Ceramics. *Wieczorek, H.*, +, *TNS Aug. 2020 1934-1945*

Constant current sources

Analysis of SET Propagation in a System in Package Point of Load Converter. *Rajkowski, T.*, +, *TNS July 2020 1494-1502*

Content-addressable storage

Performance Study of the First 2-D Prototype of Vertically Integrated Pattern Recognition Associative Memory. *Deptuch, G.*, +, *TNS Sept. 2020 2111-2118*

Convolutional neural nets

Automatic and Real-Time Identification of Radionuclides in Gamma-Ray Spectra: A New Method Based on Convolutional Neural Network Trained With Synthetic Data Set. *Daniel, G.*, +, *TNS April 2020 644-653*

Compton Background Elimination for in Vivo X-Ray Fluorescence Imaging of Gold Nanoparticles Using Convolutional Neural Network. *Jung, S.*, +, *TNS Nov. 2020 2311-2320*

Understanding the Impact of Quantization, Accuracy, and Radiation on the Reliability of Convolutional Neural Networks on FPGAs. *Libano, F.*, +, *TNS July 2020 1478-1484*

Copper

Investigation of Thermoluminescence Properties of Potential Fibered-OSL Dosimeter Materials. *Benabdesselam, M.*, +, *TNS July 2020 1663-1668*

Longitudinal and Transverse Measurement to Evaluate the Beam Impedance on a Ceramic Ring-Loaded Thin-Wall Vacuum Chamber in BRing at HIAF. *Zhu, G.*, +, *TNS July 2020 1702-1709*

Radiation Resistance of Single-Mode Optical Fibers at $\lambda = 1.55 \mu\text{m}$ Under Irradiation at IVG.1M Nuclear Reactor. *Kashaykin, P.F.*, +, *TNS Oct. 2020 2162-2171*

Coprocessors

Error Detection and Mitigation of Data-Intensive Microprocessor Applications Using SIMD and Trace Monitoring. *Pena-Fernandez, M.*, +, *TNS July 2020 1452-1460*

Core-shell nanostructures

Luminescent Nanocomposites for Biomedical Applications. *Popovich, K.*, +, *TNS June 2020 962-968*

Cosmic background radiation

Low-Energy Protons—Where and Why “Rare Events” Matter. *Rodbell, K.P.*, *TNS July 2020 1204-1215*

Cosmic ray apparatus

Irradiation Test of 65-nm Bulk SRAMs With DC Muon Beam at RCNP-MUSIC Facility. *Mahara, T.*, +, *TNS July 2020 1555-1559*

Least Mean Squares Filters Suppressing the Radio-Frequency Interference in AERA Cosmic Ray Radio Detection. *Szadkowski, Z.*, *TNS Jan. 2020 405-413*

Response of the BGO Calorimeter to Cosmic-Ray Nuclei in the DAMPE Experiment on Orbit. *Dai, H.T.*, +, *TNS June 2020 956-961*

Cosmic ray energy spectra

Response of the BGO Calorimeter to Cosmic-Ray Nuclei in the DAMPE Experiment on Orbit. *Dai, H.T.*, +, *TNS June 2020 956-961*

Cosmic ray muons

Irradiation Test of 65-nm Bulk SRAMs With DC Muon Beam at RCNP-MUSIC Facility. *Mahara, T.*, +, *TNS July 2020 1555-1559*

Cosmic ray nuclei

Response of the BGO Calorimeter to Cosmic-Ray Nuclei in the DAMPE Experiment on Orbit. *Dai, H.T.*, +, *TNS June 2020 956-961*

Cosmic ray protons

Analysis of the Drift of the South Atlantic Anomaly From ICARE and SEM-2 Flight Data. *Aubry, M.*, +, *TNS July 2020 1251-1255*

Cosmic ray showers

Least Mean Squares Filters Suppressing the Radio-Frequency Interference in AERA Cosmic Ray Radio Detection. *Szadkowski, Z.*, *TNS Jan. 2020 405-413*

Cosmic rays

Design-of-Experiments and Monte-Carlo Methods in Upset Rate-Calculations. *Hansen, D.L.*, *TNS Jan. 2020 336-344*

Cryogenic electronics

Cryogenic Bandgap Reference Circuit With Compact Model Parameter Extraction of MOSFETs and BJTs for HPGe Detectors. *Liu, F.*, +, *TNS Oct. 2020 2209-2216*

Cryostats

Radiation Environment in the LHC Arc Sections During Run 2 and Future HL-LHC Operations. *Bilko, K.*, +, *TNS July 2020 1682-1690*

Crystal growth from melt

- Bulk Single Crystal Growth of W Co-Doped Ce:Gd₃Ga₃Al₂O₁₂ by Czochralski Method. *Ueno, M.*, +, *TNS June 2020 1045-1048*
- Characterization of Silver-Doped LiF Crystal Grown by Czochralski Technique for Dark Matter Search Application. *Pandey, I.R.*, +, *TNS June 2020 915-921*
- Composite Scintillators Based on the Films and Crystals of (Lu,Gd,La)-₂Si₂O₇ Pyrosilicates. *Kurosawa, S.*, +, *TNS June 2020 994-998*
- Crystal Growth and Scintillation Properties of Carbazole for Neutron Detection. *Yamaji, A.*, +, *TNS June 2020 1027-1031*
- Development of Tin-Based Single Crystal Scintillator for Double-Beta Decay Experiments. *Aryal, P.*, +, *TNS June 2020 922-926*
- Growth of Large-Area Cd_{0.9}Zn_{0.1}Te Single Crystals and Fabrication of Pixelated Guard-Ring Detector for Room-Temperature γ -Ray Detection. *Sajjad, M.*, +, *TNS Aug. 2020 1946-1951*
- Luminescence and Scintillation Properties of Mg²⁺-Codoped Lu_{0.6}Gd_{2.4}Al₂Ga₃O₁₂:Ce Single Crystal. *Chewpraditkul, W.*, +, *TNS June 2020 904-909*
- Optical and Scintillation Properties of Hf³⁺ Codoped SrI₂:Eu²⁺ Single Crystals. *Wang, S.*, +, *TNS June 2020 876-879*
- Scintillation Characteristics of Mg²⁺-Codoped Y_{0.8}Gd_{2.2}(Al_{1-x}Ga_x)O₁₂:Ce Single Crystals. *Chewpraditkul, W.*, +, *TNS June 2020 910-914*
- Scintillation Properties of β -Ga₂O₃ Single Crystal Excited by α -Ray. *He, N.*, +, *TNS Jan. 2020 400-404*
- Scintillation Properties of Tetrafluoroaluminate Crystal. *Daniel, D.J.*, +, *TNS June 2020 898-903*
- Tl₂ZrCl₆ and Tl₂HfCl₆ Intrinsic Scintillators for Gamma Rays and Fast Neutron Detection. *Bhattacharya, P.*, +, *TNS June 2020 1032-1034*

Crystal growth from solution

- Development of Tin-Based Single Crystal Scintillator for Double-Beta Decay Experiments. *Aryal, P.*, +, *TNS June 2020 922-926*

Crystal structure

- Crystal Growth and Scintillation Properties of Carbazole for Neutron Detection. *Yamaji, A.*, +, *TNS June 2020 1027-1031*
- Role of Chemical Substitution in the Photoluminescence Properties of Cerium Samarium Tungstates Ce_(2-x)Sm_x(WO₄)₃ (0 \leq x \leq 0.3). *Derraji, K.*, +, *TNS April 2020 568-574*

Current density

- Mechanism Analysis of Proton Irradiation-Induced Increase of 3-dB Bandwidth of GaN-Based Microlight-Emitting Diodes for Space Light Communication. *Wang, L.*, +, *TNS July 2020 1360-1364*

Current distribution

- High Displacement Damage Dose Effects in Radiation Hardened CMOS Image Sensors. *Rizzolo, S.*, +, *TNS July 2020 1256-1262*

Cyclotrons

- Design and Research of Magnetic Field Mapping System for SC200. *Chen, G.*, +, *TNS Jan. 2020 369-373*

D**Dangling bonds**

- Observation of Radiation-Induced Leakage Current Defects in MOS Oxides With Multifrequency Electrically Detected Magnetic Resonance and Near-Zero-Field Magnetoresistance. *Moxim, S.J.*, +, *TNS Jan. 2020 228-233*

Dark conductivity

- Comparison of X-Ray and Electron Radiation Effects on Dark Current Non-Uniformity and Fluctuations in CMOS Image Sensors. *Le Roch, A.*, +, *TNS Jan. 2020 268-277*
- Displacement Damage Effects in InGaAs Photodiodes due to Electron, Proton, and Neutron Irradiations. *Nuns, T.*, +, *TNS July 2020 1263-1272*
- Phosphorus Versus Arsenic: Role of the Photodiode Doping Element in CMOS Image Sensor Radiation-Induced Dark Current and Random Telegraph Signal. *Le Roch, A.*, +, *TNS July 2020 1241-1250*
- Response of Waveguide-Integrated Germanium-on-Silicon p-i-n Photodiodes to Neutron Displacement Damage. *Goley, P.S.*, +, *TNS Jan. 2020 296-304*

Dark matter

- Measurement of the Anisotropic Response of the ZnWO₄ Crystal for Developing the Direction-Sensitive Dark Matter Detector. *Ichimura, K.*, +, *TNS June 2020 894-897*
- Response of the BGO Calorimeter to Cosmic-Ray Nuclei in the DAMPE Experiment on Orbit. *Dai, H.T.*, +, *TNS June 2020 956-961*
- The Quenching Effect of BGO Crystals on Relativistic Heavy Ions in the DAMPE Experiment. *Wei, Y.*, +, *TNS June 2020 939-945*

Data acquisition

- A DAQ Upgrade Solution for Belle II Experiment. *Liu, Z.*, +, *TNS Aug. 2020 1904-1911*
- A Plutonium Mass Uncertainty Assessment Using a Cherenkov-Based Neutron Multiplicity Water Detector. *Asghari, A.*, +, *TNS Nov. 2020 2431-2438*
- Design and Performance of Data Acquisition and Control System for the Muon g-2 Laser Calibration. *Mastroianni, S.*, +, *TNS May 2020 832-839*
- Phase I Upgrade of the Readout System of the Vertex Detector at the LHCb Experiment. *Fernandez Prieto, A.*, +, *TNS April 2020 732-739*
- Reducing Soft Error Rate of SoCs Analog-to-Digital Interfaces With Design Diversity Redundancy. *Gonzalez, C.J.*, +, *TNS March 2020 518-524*
- Study of the Data Acquisition System for ITER Divertor Neutron Flux Monitor Diagnostic. *Fedorov, V.A.*, +, *TNS April 2020 688-693*
- Timepix3 Luminosity Determination of 13-TeV Proton-Proton Collisions at the ATLAS Experiment. *Sopczak, A.*, *TNS April 2020 609-616*

Data analysis

- Real Time Data Analysis With the ATLAS Trigger at the LHC in Run-2. *Beauchemin, P.*, *TNS Sept. 2020 2128-2135*

Data communication

- A Confident Configuration for an Environmental Radiation Monitoring System. *Hung, D.T.*, +, *TNS Oct. 2020 2224-2230*

Deep level transient spectroscopy

- In Situ* Deep-Level Transient Spectroscopy and Dark Current Measurements of Proton-Irradiated InGaAs Photodiodes. *Nelson, G.T.*, +, *TNS Sept. 2020 2051-2061*
- Evolution of Ionization-Induced Defects in GLPNP Bipolar Transistors at Different Temperatures. *Dong, L.*, +, *TNS Sept. 2020 2003-2008*

Defect states

- Bulk Single Crystal Growth of W Co-Doped Ce:Gd₃Ga₃Al₂O₁₂ by Czochralski Method. *Ueno, M.*, +, *TNS June 2020 1045-1048*
- Observation of Radiation-Induced Leakage Current Defects in MOS Oxides With Multifrequency Electrically Detected Magnetic Resonance and Near-Zero-Field Magnetoresistance. *Moxim, S.J.*, +, *TNS Jan. 2020 228-233*

Degradation

- Displacement Damage Effects Mitigation Approach for Heterojunction Bipolar Transistor Frequency Synthesizers. *Sotskov, D.I.*, +, *TNS Nov. 2020 2396-2404*
- Effect of Drift Length on Shifts in 400-V SOI LDMOS Breakdown Voltage Due to TID. *Shu, L.*, +, *TNS Nov. 2020 2392-2395*

Densitometry

- CdZnTe-Based X-Ray Spectrometer for Absolute Density Determination. *Zambelli, N.*, +, *TNS Oct. 2020 2273-2277*

Density

- CdZnTe-Based X-Ray Spectrometer for Absolute Density Determination. *Zambelli, N.*, +, *TNS Oct. 2020 2273-2277*

Density functional theory

- Modeling Photocathode Performance Using MedeA-VASP Simulation Software. *Williams, J.O.D.*, +, *TNS Sept. 2020 1987-1992*
- Total-Ionizing-Dose Effects and Low-Frequency Noise in 16-nm InGaAs FinFETs With HfO₂/Al₂O₃ Dielectrics. *Bonaldo, S.*, +, *TNS Jan. 2020 210-220*
- Total-Ionizing-Dose Effects, Border Traps, and 1/f Noise in Emerging MOS Technologies. *Fleetwood, D.M.*, *TNS July 2020 1216-1240*

Density measurement

- CdZnTe-Based X-Ray Spectrometer for Absolute Density Determination. *Zambelli, N.*, +, *TNS Oct. 2020 2273-2277*

Design of experiments

- Design-of-Experiments and Monte-Carlo Methods in Upset Rate-Calculations. *Hansen, D.L.*, *TNS Jan. 2020 336-344*

Detectors

Development of a Position-Sensitive 4π Compton Camera Based on a Single Segmented Scintillator. *Lee, H.*, +, *TNS Dec. 2020 2511-2522*

Simulation of High-Altitude Nuclear Electromagnetic Pulse Using a Modified Model of Scattered Gamma. *Li, Y.*, +, *TNS Dec. 2020 2474-2480*

X-Ray Fluorescence Imaging Based on CdTe Detector Array for Analysis of Various Materials. *Jo, A.*, +, *TNS Dec. 2020 2523-2534*

Diagnostic radiography

Compton Background Elimination for in Vivo X-Ray Fluorescence Imaging of Gold Nanoparticles Using Convolutional Neural Network. *Jung, S.*, +, *TNS Nov. 2020 2311-2320*

ROI-Wise Material Decomposition in Spectral Photon-Counting CT. *Xie, B.*, +, *TNS June 2020 1066-1075*

Diamond

Comparison Between Silicon Carbide and Diamond for Thermal Neutron Detection at Room Temperature. *Obraztsova, O.*, +, *TNS May 2020 863-871*

High-Temperature Diamond Detector for Neutron Generator Output Monitoring in Well Logging Applications. *Anniyev, T.*, +, *TNS Aug. 2020 1885-1892*

Diffraction gratings

Response of Waveguide-Integrated Germanium-on-Silicon p-i-n Photodiodes to Neutron Displacement Damage. *Goley, P.S.*, +, *TNS Jan. 2020 296-304*

Diffractometers

High-Resolution Thermal Neutron Imaging With $^{10}\text{Boron/CsI:TI}$ Scintillator Screen. *Miller, S.R.*, +, *TNS Aug. 2020 1929-1933*

Digital arithmetic

A Low-Overhead FFT Design With Higher SEU Resilience Implemented in FPGA. *Wang, H.*, +, *TNS May 2020 805-810*

Digital filters

A Confident Configuration for an Environmental Radiation Monitoring System. *Hung, D.T.*, +, *TNS Oct. 2020 2224-2230*

Collimator-Less Passive Gamma Scanning for Radioactive Waste Drums. *Vax, E.*, +, *TNS April 2020 544-551*

Digital integrated circuits

Exploiting Transistor Folding Layout as RHBD Technique Against Single-Event Transients. *Aguiar, Y.Q.*, +, *TNS July 2020 1581-1589*

Directional couplers

A 150-kW Pulse Solid-State Amplifier for Radio Frequency Quadrupole Application. *Jain, A.*, +, *TNS Nov. 2020 2303-2310*

Discrete Fourier transforms

Ionizing Radiation Effects Spectroscopy for Analysis of Single-Event Transients. *Loveless, T.D.*, +, *TNS Jan. 2020 99-107*

Distributed feedback lasers

Radiation Response of Distributed Feedback Bragg Gratings for Space Applications. *Morana, A.*, +, *TNS Jan. 2020 284-288*

Distributed sensors

Performances of Radiation-Hardened Single-Ended Raman Distributed Temperature Sensors Using Commercially Available Fibers. *Morana, A.*, +, *TNS Jan. 2020 305-311*

Doping

Effect of Drift Length on Shifts in 400-V SOI LDMOS Breakdown Voltage Due to TID. *Shu, L.*, +, *TNS Nov. 2020 2392-2395*

Investigation of Thermoluminescence Properties of Potential Fibered-OSL Dosimeter Materials. *Benabdesselam, M.*, +, *TNS July 2020 1663-1668*

Doping profiles

Band Gap Variation and Trap Distribution in Transparent Garnet Scintillator Ceramics. *Wieczorek, H.*, +, *TNS Aug. 2020 1934-1945*

Bulk Single Crystal Growth of W Co-Doped Ce:Gd₃Ga₃Al₂O₁₂ by Czochralski Method. *Ueno, M.*, +, *TNS June 2020 1045-1048*

High Displacement Damage Dose Effects in Radiation Hardened CMOS Image Sensors. *Rizzolo, S.*, +, *TNS July 2020 1256-1262*

Optical and Scintillation Properties of Hf⁴⁺ Codoped SrI₂:Eu²⁺ Single Crystals. *Wang, S.*, +, *TNS June 2020 876-879*

TID-Induced Breakdown Voltage Degradation in Uniform and Linear Variable Doping SOI p-LDMOSFETs. *Shu, L.*, +, *TNS July 2020 1390-1394*

Dosimeters

A Solid-State Microdosimeter for Dose and Radiation Quality Monitoring for Astronauts in Space. *Peracchi, S.*, +, *TNS Jan. 2020 169-174*

On the Combined Effect of Silicon Oxide Thickness and Boron Implantation Under the Gate in MOSFET Dosimeters. *Biasi, G.*, +, *TNS March 2020 534-540*

On-Chip Total Ionizing Dose Digital Monitor in Fully Depleted SOI Technologies. *Abouzeid, F.*, +, *TNS July 2020 1326-1331*

Remote Measurements of X-Rays Dose Rate Using a Cerium-Doped Air-Clad Optical Fiber. *Bahout, J.*, +, *TNS July 2020 1658-1662*

Simulation and Measurements of Collimator Effects in Proton and Neutron Radiation Testing for Single-Event Effects. *Belanger-Champagne, C.*, +, *TNS Jan. 2020 161-168*

SOI Thin Microdosimeters for High LET Single-Event Upset Studies in Fe, O, Xe, and Cocktail Ion Beam Fields. *James, B.*, +, *TNS Jan. 2020 146-153*

Temperature-Compensated MOS Dosimeter Fully Integrated in a High-Voltage 0.35 μm CMOS Process. *Carbonetto, S.*, +, *TNS June 2020 1118-1124*

Ultralow Power Ionizing Dose Sensor Based on Complementary Fully Depleted MOS Transistors for Radiotherapy Application. *Alcalde Bessia, F.*, +, *TNS Oct. 2020 2217-2223*

Dosimetry

A Solid-State Microdosimeter for Dose and Radiation Quality Monitoring for Astronauts in Space. *Peracchi, S.*, +, *TNS Jan. 2020 169-174*

Colloidal Quantum Dot-Doped Optical Fibers for Scintillation Dosimetry. *Whittaker, C.*, +, *TNS June 2020 1040-1044*

Dose Measurements and Simulations of the RADFETs Response Onboard the Alphasat CTTB Experiments. *Sampaio, J.M.*, +, *TNS Sept. 2020 2028-2033*

Gamma-Heating and Gamma Flux Measurements in the JSI TRIGA Reactor: Results and Prospects. *Gruel, A.*, +, *TNS April 2020 559-567*

Growth and Scintillation Properties of a New Red-Emitting Scintillator Rb₂HfI₆ for the Fiber-Reading Radiation Monitor. *Kodama, S.*, +, *TNS June 2020 1055-1062*

Hybrid Multipixel Array X-Ray Detectors for Real-Time Direct Detection of Hard X-Rays. *Thirimanne, H.M.*, +, *TNS Oct. 2020 2238-2245*

Implementation of Optical-Fiber Postmortem Dose Measurements: A Proof of Concept. *Di Francesca, D.*, +, *TNS Jan. 2020 140-145*

Intercomparison of Ionizing Doses From Space Shielding Analyses Using MCNP, Geant4, FASTRAD, and NOVICE. *Jun, B.*, +, *TNS July 2020 1629-1636*

Investigation of Thermoluminescence Properties of Potential Fibered-OSL Dosimeter Materials. *Benabdesselam, M.*, +, *TNS July 2020 1663-1668*

Nuclear Data Covariance Analysis in Radiation-Transport Simulations Utilizing SCALE Sampler and the IRDFF Nuclear Data Library. *Quartemont, N.J.*, +, *TNS March 2020 482-491*

On the Combined Effect of Silicon Oxide Thickness and Boron Implantation Under the Gate in MOSFET Dosimeters. *Biasi, G.*, +, *TNS March 2020 534-540*

Radiation Environment in the LHC Arc Sections During Run 2 and Future HL-LHC Operations. *Bilko, K.*, +, *TNS July 2020 1682-1690*

Remote Measurements of X-Rays Dose Rate Using a Cerium-Doped Air-Clad Optical Fiber. *Bahout, J.*, +, *TNS July 2020 1658-1662*

Simulation and Measurements of Collimator Effects in Proton and Neutron Radiation Testing for Single-Event Effects. *Belanger-Champagne, C.*, +, *TNS Jan. 2020 161-168*

Special NSREC 2019 issue of the IEEE Transactions on Nuclear Science Editor Comments. *Fleetwood, D.*, +, *TNS Jan. 2020 7*

Steady-State X-Ray Radiation-Induced Attenuation in Canonical Optical Fibers. *De Michele, V.*, +, *TNS July 2020 1650-1657*

Ultralow Power Ionizing Dose Sensor Based on Complementary Fully Depleted MOS Transistors for Radiotherapy Application. *Alcalde Bessia, F.*, +, *TNS Oct. 2020 2217-2223*

Unmanned Radiation-Monitoring System. *Cerba, S.*, +, *TNS April 2020 636-643*

Double beta decay

Development of Tin-Based Single Crystal Scintillator for Double-Beta Decay Experiments. *Aryal, P.*, +, *TNS June 2020 922-926*

Front-End Electronics for the SiPM-Readout Gaseous TPC for Neutrinoless Double-Beta Decay Search. *Nakamura, K.Z.*, +, *TNS July 2020 1772-1776*

DRAM chips

Radiation-Induced Variable Retention Time in Dynamic Random Access Memories. *Goiffon, V.*, +, *TNS Jan. 2020 234-244*

Drug delivery systems

Luminescent Nanocomposites for Biomedical Applications. *Popovich, K.*, +, *TNS June 2020 962-968*

Drugs

Luminescent Nanocomposites for Biomedical Applications. *Popovich, K.*, +, *TNS June 2020 962-968*

E

Electric breakdown

TID-Induced Breakdown Voltage Degradation in Uniform and Linear Variable Doping SOI p-LDMOSFETs. *Shu, L.*, +, *TNS July 2020 1390-1394*

Electric current measurement

An Update to MOBE-DIC Using Current Monitor Measurements From Galileo. *Hands, A.D.P.*, +, *TNS Jan. 2020 181-190*

Electric fields

A Modified Steady-State Method for Space Charge-Limited Effect of SGEMP. *Chen, J.*, +, *TNS Nov. 2020 2353-2362*

Effect of Drift Length on Shifts in 400-V SOI LDMOS Breakdown Voltage Due to TID. *Shu, L.*, +, *TNS Nov. 2020 2392-2395*

Ionizing-Radiation Response and Low-Frequency Noise of 28-nm MOSFETs at Ultrahigh Doses. *Bonaldo, S.*, +, *TNS July 2020 1302-1311*

Monitoring Deep Dielectric Charging Effects in Space. *Yu, X.*, +, *TNS April 2020 716-721*

Electric properties

Comparison of X-Ray and Proton Irradiation Effects on the Characteristics of InGaN/GaN Multiple Quantum Wells Light-Emitting Diodes. *Wang, L.*, +, *TNS July 2020 1345-1350*

Radiation Effects on FR4 Printed Circuit Boards. *Scheuer, K.*, +, *TNS Aug. 2020 1846-1851*

Electric sensing devices

Assessment of On-Chip Current Sensor for Detection of Thermal-Neutron-Induced Transients. *Possamai Bastos, R.*, +, *TNS July 2020 1404-1411*

Electrical resistivity

Effect of the Electric Field Strength on the Energy Resolution of Cr/CdTe/Pt Detectors. *Sklyarchuk, V.*, +, *TNS Nov. 2020 2439-2444*

Electrodes

Fabrication and First Characterization of Silicon-Based Full 3-D Microdosimeters. *Kok, A.*, +, *TNS Dec. 2020 2490-2500*

Electromagnetic fields

A Modified Steady-State Method for Space Charge-Limited Effect of SGEMP. *Chen, J.*, +, *TNS Nov. 2020 2353-2362*

Electromagnetic pulse

3-D Simulation of Cavity SGEMP Interference Generated by Pulsed X-Rays. *Xu, Z.*, +, *TNS Feb. 2020 425-433*

A Modified Steady-State Method for Space Charge-Limited Effect of SGEMP. *Chen, J.*, +, *TNS Nov. 2020 2353-2362*

Calculation of Characteristic Time of Space Charge Limited Effect of SGEMP. *Chen, J.*, +, *TNS May 2020 818-822*

Quantitative Study of Pulsed X-Ray-Induced Electromagnetic Response in Coaxial Cables. *Ribiere, M.*, +, *TNS July 2020 1722-1731*

Electron accelerators

Continuous Wave Operation of Superconducting Accelerating Cavities With High Loaded Quality Factor. *Cichalewski, W.*, +, *TNS Sept. 2020 2119-2127*

Electron affinity

Modeling Photocathode Performance Using MedeA-VASP Simulation Software. *Williams, J.O.D.*, +, *TNS Sept. 2020 1987-1992*

Electron backscattering

Calculation of Characteristic Time of Space Charge Limited Effect of SGEMP. *Chen, J.*, +, *TNS May 2020 818-822*

Electron beam effects

A Survey of the Analytical Methods of Proton-NIEL Calculations in Silicon and Germanium. *Akkerman, A.*, +, *TNS Aug. 2020 1813-1825*

Comparison of X-Ray and Electron Radiation Effects on Dark Current Non-Uniformity and Fluctuations in CMOS Image Sensors. *Le Roch, A.*, +, *TNS Jan. 2020 268-277*

Experimental and Numerical Study of Internal Charging on Spacecraft and Risks of Discharge on Floating Metallic Elements. *Ben Zaid, A.*, +, *TNS Jan. 2020 191-200*

Luminescent Nanocomposites for Biomedical Applications. *Popovich, K.*, +, *TNS June 2020 962-968*

New SEU Modeling Method for Calibrating Target System to Multiple Radiation Particles. *Caron, P.*, +, *TNS Jan. 2020 44-49*

Electron beams

Experimental and Numerical Study of Internal Charging on Spacecraft and Risks of Discharge on Floating Metallic Elements. *Ben Zaid, A.*, +, *TNS Jan. 2020 191-200*

Electron density

Scintillation Properties of β -Ga₂O₃ Single Crystal Excited by α -Ray. *He, N.*, +, *TNS Jan. 2020 400-404*

Electron emission

A Modified Steady-State Method for Space Charge-Limited Effect of SGEMP. *Chen, J.*, +, *TNS Nov. 2020 2353-2362*

Electron multiplier detectors

Design Studies of High-Resolution Readout Planes Using Zigzags With GEM Detectors. *Azmoun, B.*, +, *TNS Aug. 2020 1869-1876*

Gas Scintillation Imager With Capillary Plate. *Sugiyama, H.*, +, *TNS June 2020 1035-1039*

Electron traps

Band Gap Variation and Trap Distribution in Transparent Garnet Scintillator Ceramics. *Wieczorek, H.*, +, *TNS Aug. 2020 1934-1945*

Bulk Single Crystal Growth of W Co-Doped Ce:Gd₃Ga₅Al₂O₁₂ by Czochralski Method. *Ueno, M.*, +, *TNS June 2020 1045-1048*

Evolution of Ionization-Induced Defects in GLPBP Bipolar Transistors at Different Temperatures. *Dong, L.*, +, *TNS Sept. 2020 2003-2008*

F-Centers in BaBrI Single Crystal. *Shendrik, R.*, +, *TNS June 2020 946-951*

Investigation of Thermoluminescence Properties of Potential Fibered-OSL Dosimeter Materials. *Benabdesselam, M.*, +, *TNS July 2020 1663-1668*

Radiation-Induced Variable Retention Time in Dynamic Random Access Memories. *Goiffon, V.*, +, *TNS Jan. 2020 234-244*

TID Response of Nanowire Field-Effect Transistors: Impact of the Back-Gate Bias. *Riffaud, J.*, +, *TNS Oct. 2020 2172-2178*

Electron-hole recombination

Comparison of X-Ray and Proton Irradiation Effects on the Characteristics of InGaN/GaN Multiple Quantum Wells Light-Emitting Diodes. *Wang, L.*, +, *TNS July 2020 1345-1350*

Investigation of Thermoluminescence Properties of Potential Fibered-OSL Dosimeter Materials. *Benabdesselam, M.*, +, *TNS July 2020 1663-1668*

Mechanism Analysis of Proton Irradiation-Induced Increase of 3-dB Bandwidth of GaN-Based Microlight-Emitting Diodes for Space Light Communication. *Wang, L.*, +, *TNS July 2020 1360-1364*

Electrostatic discharge

A Radiation-Hardened Dual-Direction SCR Based on LDMOS for ESD Protection in the Extreme Radiation Environment. *Wu, M.*, +, *TNS April 2020 708-715*

Experimental and Numerical Study of Internal Charging on Spacecraft and Risks of Discharge on Floating Metallic Elements. *Ben Zaid, A.*, +, *TNS Jan. 2020 191-200*

Elemental semiconductors

A Survey of the Analytical Methods of Proton-NIEL Calculations in Silicon and Germanium. *Akkerman, A.*, +, *TNS Aug. 2020 1813-1825*

Comparison of Back-Thinned Detector Ultraviolet Quantum Efficiency for Two Commercially Available Passivation Treatments. *Heymes, J.*, +, *TNS Aug. 2020 1962-1967*

Comparison of Sensitive Volumes Associated With Ion- and Laser-Induced Charge Collection in an Epitaxial Silicon Diode. *Ryder, K.L.*, +, *TNS Jan. 2020 57-62*

Comparison of X-Ray and Proton Irradiation Effects on the Characteristics of InGaN/GaN Multiple Quantum Wells Light-Emitting Diodes. *Wang, L.*, +, *TNS July 2020 1345-1350*

- Dose Measurements and Simulations of the RADFETs Response Onboard the Alphasat CTTB Experiments. *Sampaio, J.M.*, +, *TNS Sept. 2020 2028-2033*
- Electronic-to-Photonic Single-Event Transient Propagation in a Segmented Mach-Zehnder Modulator in a Si/SiGe Integrated Photonics Platform. *Tzintzarov, G.N.*, +, *TNS Jan. 2020 260-267*
- Evaluation of an Operational Concept for Improving Radiation Tolerance of Single-Photon Avalanche Diode (SPAD) Arrays. *Smith, J.A.*, +, *TNS May 2020 797-804*
- Evaluation of Soft-Error Tolerance by Neutrons and Heavy Ions on Flip Flops With Guard Gates in a 65-nm Thin BOX FDSOI Process. *Ebara, M.*, +, *TNS July 2020 1470-1477*
- Improved Model for Ionization-Induced Surface Recombination Current in p-n-p BJTs. *Li, L.*, +, *TNS Aug. 2020 1826-1834*
- Modeling of Near Zero-Field Magnetoresistance and Electrically Detected Magnetic Resonance in Irradiated Si/SiO₂ MOSFETs. *Harmon, N.J.*, +, *TNS July 2020 1669-1673*
- New Approach for Pulsed-Laser Testing That Mimics Heavy-Ion Charge Deposition Profiles. *Hales, J.M.*, +, *TNS Jan. 2020 81-90*
- Observation of Radiation-Induced Leakage Current Defects in MOS Oxides With Multifrequency Electrically Detected Magnetic Resonance and Near-Zero-Field Magnetoresistance. *Moxim, S.J.*, +, *TNS Jan. 2020 228-233*
- Phosphorus Versus Arsenic: Role of the Photodiode Doping Element in CMOS Image Sensor Radiation-Induced Dark Current and Random Telegraph Signal. *Le Roch, A.*, +, *TNS July 2020 1241-1250*
- Polarization Dependence of Pulsed Laser-Induced SEEs in SOI FinFETs. *Ryder, L.D.*, +, *TNS Jan. 2020 38-43*
- Radiation-Induced Variable Retention Time in Dynamic Random Access Memories. *Goiffon, V.*, +, *TNS Jan. 2020 234-244*
- Reducing Soft Error Rate of SoCs Analog-to-Digital Interfaces With Design Diversity Redundancy. *Gonzalez, C.J.*, +, *TNS March 2020 518-524*
- Response of Waveguide-Integrated Germanium-on-Silicon p-i-n Photodiodes to Neutron Displacement Damage. *Goley, P.S.*, +, *TNS Jan. 2020 296-304*
- Sensitivity of Silicon Photomultipliers to Direct Gamma Ray Irradiation. *Lavelle, C.M.*, +, *TNS Jan. 2020 389-399*
- TID Response of Bulk Si PMOS FinFETs: Bias, Fin Width, and Orientation Dependence. *Ren, Z.*, +, *TNS July 2020 1320-1325*
- TID-Induced Breakdown Voltage Degradation in Uniform and Linear Variable Doping SOI p-LDMOSFETs. *Shu, L.*, +, *TNS July 2020 1390-1394*
- Total-Ionizing-Dose Effects, Border Traps, and 1/f Noise in Emerging MOS Technologies. *Fleetwood, D.M.*, *TNS July 2020 1216-1240*
- Embedded systems**
- Empirical Mathematical Model of Microprocessor Sensitivity and Early Prediction to Proton and Neutron Radiation-Induced Soft Errors. *Serrano-Cases, A.*, +, *TNS July 2020 1511-1520*
- Method for System-Level Testing of COTS Electronic Board Under High-Energy Heavy Ions. *de Bibikoff, A.*, +, *TNS Oct. 2020 2179-2187*
- Spin-Transfer Torque Magnetic Tunnel Junction for Single-Event Effects Mitigation in IC Design. *Coi, O.*, +, *TNS July 2020 1674-1681*
- Emergency services**
- Unmanned Radiation-Monitoring System. *Cerba, S.*, +, *TNS April 2020 636-643*
- EMP radiation effects**
- Simulation of High-Altitude Nuclear Electromagnetic Pulse Using a Modified Model of Scattered Gamma. *Li, Y.*, +, *TNS Dec. 2020 2474-2480*
- Energy gap**
- Band Gap Variation and Trap Distribution in Transparent Garnet Scintillator Ceramics. *Wieczorek, H.*, +, *TNS Aug. 2020 1934-1945*
- Characterization of Silver-Doped LiF Crystal Grown by Czochralski Technique for Dark Matter Search Application. *Pandey, I.R.*, +, *TNS June 2020 915-921*
- Total Dose Effects on Negative and Positive Low-Dropout Linear Regulators. *Privat, A.*, +, *TNS July 2020 1332-1338*
- Energy loss of particles**
- A Survey of the Analytical Methods of Proton-NIEL Calculations in Silicon and Germanium. *Akkerman, A.*, +, *TNS Aug. 2020 1813-1825*
- Displacement Damage Effects in InGaAs Photodiodes due to Electron, Proton, and Neutron Irradiations. *Nuns, T.*, +, *TNS July 2020 1263-1272*
- Photocurrent From Single Collision 14-MeV Neutrons in GaN and GaAs. *Jasica, M.J.*, +, *TNS Jan. 2020 221-227*
- Simulating Charge Deposition by Cosmic Rays Inside Astronomical Imaging Detectors. *Lucsanyi, D.*, +, *TNS July 2020 1623-1628*
- Simulation of Single Particle Displacement Damage in Si_{1-x}Ge_x Alloys—Interaction of Primary Particles With the Material and Generation of the Damage Structure. *Jarrin, T.*, +, *TNS July 2020 1273-1283*
- Energy measurement**
- Energy-Resolved Soft-Error Rate Measurements for 1–800 MeV Neutrons by the Time-of-Flight Technique at LANSCE. *Iwashita, H.*, +, *TNS Nov. 2020 2363-2369*
- Environmental science computing**
- A Confident Configuration for an Environmental Radiation Monitoring System. *Hung, D.T.*, +, *TNS Oct. 2020 2224-2230*
- Generation of Synthetic Data for a Radiation Detection Algorithm Competition. *Nicholson, A.D.*, +, *TNS Aug. 2020 1968-1975*
- Epitaxial growth**
- Comparison of Sensitive Volumes Associated With Ion- and Laser-Induced Charge Collection in an Epitaxial Silicon Diode. *Ryder, K.L.*, +, *TNS Jan. 2020 57-62*
- Epitaxial layers**
- Composite Scintillators Based on the Films and Crystals of (Lu,Gd,La)₂Si₂O₇ Pyrosilicates. *Kurosawa, S.*, +, *TNS June 2020 994-998*
- Erbium**
- Radiation Effects on WDM and DWDM Architectures of Preamplifier and Boost-Amplifier. *Aubry, M.*, +, *TNS Jan. 2020 278-283*
- Error correction codes**
- Impact of Tensor Cores and Mixed Precision on the Reliability of Matrix Multiplication in GPUs. *Basso, P.M.*, +, *TNS July 2020 1560-1565*
- Statistical Method to Extract Radiation-Induced Multiple-Cell Upsets in SRAM-Based FPGAs. *Perez-Celis, A.*, +, *TNS Jan. 2020 50-56*
- Error detection**
- Error Detection and Mitigation of Data-Intensive Microprocessor Applications Using SIMD and Trace Monitoring. *Pena-Fernandez, M.*, +, *TNS July 2020 1452-1460*
- Error statistics**
- Layer-Dependent Bit Error Variation in 3-D NAND Flash Under Ionizing Radiation. *Kumari, P.*, +, *TNS Sept. 2020 2021-2027*
- Understanding the Key Parameter Dependences Influencing the Soft-Error Susceptibility of Standard Combinational Logic. *Pande, N.*, +, *TNS Jan. 2020 116-125*
- Europium**
- Development of Gamma-Ray Detector Arrays Consisting of Diced Eu-Doped SrI₂ Scintillator Arrays and TSV-MPPC Arrays. *Yoshino, M.*, +, *TNS June 2020 999-1002*
- Influence of Annealing Temperature on the Performance of Lu₂O₃:Eu³⁺ Nanowire Arrays Synthesized by Sol-Gel Method Using AAO Template. *Hu, Y.*, +, *TNS Aug. 2020 1899-1903*
- Optical and Scintillation Properties of Hf⁴⁺ Codoped SrI₂:Eu²⁺ Single Crystals. *Wang, S.*, +, *TNS June 2020 876-879*
- Evaporation**
- Development of Tin-Based Single Crystal Scintillator for Double-Beta Decay Experiments. *Aryal, P.*, +, *TNS June 2020 922-926*
- Excitons**
- F-Centers in BaBrI Single Crystal. *Shendrik, R.*, +, *TNS June 2020 946-951*
- Expectation-maximization algorithms**
- Collimator-Less Passive Gamma Scanning for Radioactive Waste Drums. *Vax, E.*, +, *TNS April 2020 544-551*
- Reconstructing the Position and Intensity of Multiple Gamma-Ray Point Sources With a Sparse Parametric Algorithm. *Vavrek, J.R.*, +, *TNS Nov. 2020 2421-2430*
- Extensometers**
- High-Temperature Measurements With a Fabry-Perot Extensometer. *Chey-mol, G.*, +, *TNS April 2020 552-558*
- Extrapolation**
- Quantitative Study of Pulsed X-Ray-Induced Electromagnetic Response in Coaxial Cables. *Ribiere, M.*, +, *TNS July 2020 1722-1731*

F

F-centers

F-Centers in BaBrI Single Crystal. *Shendrik, R.*, +, *TNS June 2020 946-951*

Fabry-Perot interferometers

High-Temperature Measurements With a Fabry-Perot Extensometer. *Chey-mol, G.*, +, *TNS April 2020 552-558*

Failure analysis

A Radiation-Tolerant, Multigigabit Serial Link Based on FPGAs. *Giordano, R.*, +, *TNS Aug. 2020 1852-1860*

Inclusion of Radiation Environment Variability for Reliability Estimates for SiC Power MOSFETs. *Austin, R.A.*, +, *TNS Jan. 2020 353-357*

Single-Event Effects in Ground-Level Infrastructure During Extreme Ground-Level Enhancements. *Dyer, A.*, +, *TNS June 2020 1139-1143*

Total Dose Effects on Negative and Positive Low-Dropout Linear Regulators. *Privat, A.*, +, *TNS July 2020 1332-1338*

Fast Fourier transforms

A Low-Overhead FFT Design With Higher SEU Resilience Implemented in FPGA. *Wang, H.*, +, *TNS May 2020 805-810*

Fault diagnosis

Assessment of On-Chip Current Sensor for Detection of Thermal-Neutron-Induced Transients. *Possamai Bastos, R.*, +, *TNS July 2020 1404-1411*

Empirical Mathematical Model of Microprocessor Sensitivity and Early Prediction to Proton and Neutron Radiation-Induced Soft Errors. *Serrano-Cases, A.*, +, *TNS July 2020 1511-1520*

Impact of Tensor Cores and Mixed Precision on the Reliability of Matrix Multiplication in GPUs. *Basso, P.M.*, +, *TNS July 2020 1560-1565*

The Use of Microprocessor Trace Infrastructures for Radiation-Induced Fault Diagnosis. *Pena-Fernandez, M.*, +, *TNS Jan. 2020 126-134*

Fault tolerant computing

Empirical Mathematical Model of Microprocessor Sensitivity and Early Prediction to Proton and Neutron Radiation-Induced Soft Errors. *Serrano-Cases, A.*, +, *TNS July 2020 1511-1520*

Fiber optic sensors

Combined Temperature and Radiation Effects on Radiation-Sensitive Single-Mode Optical Fibers. *Campanella, C.*, +, *TNS July 2020 1643-1649*

High-Temperature Measurements With a Fabry-Perot Extensometer. *Chey-mol, G.*, +, *TNS April 2020 552-558*

Implementation of Optical-Fiber Postmortem Dose Measurements: A Proof of Concept. *Di Francesca, D.*, +, *TNS Jan. 2020 140-145*

Irradiation Tests of Optical Fibers and Cables Devoted to Corium Monitoring in Case of a Severe Accident in a Nuclear Power Plant. *Chey-mol, G.*, +, *TNS April 2020 669-678*

Performances of Radiation-Hardened Single-Ended Raman Distributed Temperature Sensors Using Commercially Available Fibers. *Morana, A.*, +, *TNS Jan. 2020 305-311*

Radiation-Response of Fiber Bragg Gratings at Low Temperatures. *Morana, A.*, +, *TNS July 2020 1637-1642*

Field effect transistors

New Approach for Pulsed-Laser Testing That Mimics Heavy-Ion Charge Deposition Profiles. *Hales, J.M.*, +, *TNS Jan. 2020 81-90*

TID Response of Nanowire Field-Effect Transistors: Impact of the Back-Gate Bias. *Riffaud, J.*, +, *TNS Oct. 2020 2172-2178*

Field programmable gate arrays

A Low-Overhead FFT Design With Higher SEU Resilience Implemented in FPGA. *Wang, H.*, +, *TNS May 2020 805-810*

A Radiation-Tolerant, Multigigabit Serial Link Based on FPGAs. *Giordano, R.*, +, *TNS Aug. 2020 1852-1860*

Achieving Picosecond-Level Phase Stability in Timing Distribution Systems With Xilinx Ultrascale Transceivers. *Mendes, E.*, +, *TNS March 2020 473-481*

Clock-Centric Serial Links for the Synchronization of Distributed Readout Systems. *Calvet, D.*, *TNS Aug. 2020 1912-1919*

Design and Performance of Data Acquisition and Control System for the Muon g-2 Laser Calibration. *Mastroianni, S.*, +, *TNS May 2020 832-839*

Design and Testing of the Address in Real-Time Data Driver Card for the Micromegas Detector of the ATLAS New Small Wheel Upgrade. *Yao, L.*, +, *TNS Sept. 2020 2155-2160*

Energy-Resolved Soft-Error Rate Measurements for 1–800 MeV Neutrons by the Time-of-Flight Technique at LANSCE. *Iwashita, H.*, +, *TNS Nov. 2020 2363-2369*

Evaluating Soft Core RISC-V Processor in SRAM-Based FPGA Under Radiation Effects. *de Oliveira, A.B.*, +, *TNS July 2020 1503-1510*

High-Energy Versus Thermal Neutron Contribution to Processor and Memory Error Rates. *Oliveira, D.*, +, *TNS June 2020 1161-1168*

Improving the Reliability of TMR With Nontriplicated I/O on SRAM FPGAs. *Cannon, M.J.*, +, *TNS Jan. 2020 312-320*

Inherent Uncertainty in the Determination of Multiple Event Cross Sections in Radiation Tests. *Franco, F.J.*, +, *TNS July 2020 1547-1554*

Least Mean Squares Filters Suppressing the Radio-Frequency Interference in AERA Cosmic Ray Radio Detection. *Szadkowski, Z.*, *TNS Jan. 2020 405-413*

Phase Drift Compensating RF Link for Femtosecond Synchronization of E-XFEL. *Sikora, D.*, +, *TNS Sept. 2020 2136-2142*

Proton- and Neutron-Induced Single-Event Upsets in FPGAs for the PANDA Experiment. *Preston, M.*, +, *TNS June 2020 1093-1106*

Qualification of Hardware Description Language Designs for Safety Critical Applications in Nuclear Power Plants. *John, A.K.*, +, *TNS March 2020 502-507*

Reliability Analysis of Ethernet-Based Solutions for Data Transmission in the CERN Radiation Environment. *Gnemmi, G.*, +, *TNS July 2020 1614-1622*

Research and Verification on Real-Time Interpolated Timing Algorithm Based on Waveform Digitization. *Fan, Y.*, +, *TNS Oct. 2020 2246-2254*

Results on FPGA-Based High-Power Tube Amplifier Linearization at DESY. *Bellandi, A.*, +, *TNS May 2020 762-767*

Single Event Upsets Under 14-MeV Neutrons in a 28-nm SRAM-Based FPGA in Static Mode. *Fabero, J.C.*, +, *TNS July 2020 1461-1469*

Statistical Method to Extract Radiation-Induced Multiple-Cell Upsets in SRAM-Based FPGAs. *Perez-Celis, A.*, +, *TNS Jan. 2020 50-56*

Thermal Neutron-Induced SEUs in the LHC Accelerator Environment. *Cecchetto, M.*, +, *TNS July 2020 1412-1420*

Understanding the Impact of Quantization, Accuracy, and Radiation on the Reliability of Convolutional Neural Networks on FPGAs. *Libano, F.*, +, *TNS July 2020 1478-1484*

Finite element analysis

Nuclear Heating Measurements by Gamma and Neutron Thermometers. *Van Nieuwenhove, R.*, +, *TNS Sept. 2020 2073-2080*

FIR filters

Least Mean Squares Filters Suppressing the Radio-Frequency Interference in AERA Cosmic Ray Radio Detection. *Szadkowski, Z.*, *TNS Jan. 2020 405-413*

Firmware

Design and Testing of the Address in Real-Time Data Driver Card for the Micromegas Detector of the ATLAS New Small Wheel Upgrade. *Yao, L.*, +, *TNS Sept. 2020 2155-2160*

Phase Drift Compensating RF Link for Femtosecond Synchronization of E-XFEL. *Sikora, D.*, +, *TNS Sept. 2020 2136-2142*

Fission reactor accidents

In Situ Gas Monitoring by Fiber-Coupled Raman Spectrometry for H₂-Risk Management in Nuclear Containment During a Severe Nuclear Accident. *Magne, S.*, +, *TNS April 2020 617-624*

Irradiation Tests of Optical Fibers and Cables Devoted to Corium Monitoring in Case of a Severe Accident in a Nuclear Power Plant. *Chey-mol, G.*, +, *TNS April 2020 669-678*

Unmanned Radiation-Monitoring System. *Cerba, S.*, +, *TNS April 2020 636-643*

Fission reactor containment

In Situ Gas Monitoring by Fiber-Coupled Raman Spectrometry for H₂-Risk Management in Nuclear Containment During a Severe Nuclear Accident. *Magne, S.*, +, *TNS April 2020 617-624*

Fission reactor cooling

In Situ Gas Monitoring by Fiber-Coupled Raman Spectrometry for H₂-Risk Management in Nuclear Containment During a Severe Nuclear Accident. *Magne, S.*, +, *TNS April 2020 617-624*

Cascaded HTGR Power-Level Control Only by Regulating Primary Helium Flow Rate. *Dong, Z.*, +, *TNS Aug. 2020 1780-1790*

Fission reactor core control

A mm³ Fiber-Coupled Scintillator for In-Core Thermal Neutron Detection in CROCUS. *Vitullo, F.*, +, *TNS April 2020 625-635*

Gamma-Heating and Gamma Flux Measurements in the JSI TRIGA Reactor: Results and Prospects. *Gruel, A.*, +, *TNS April 2020 559-567*

Integral Sliding Mode for Power Distribution Control of Advanced Heavy Water Reactor. *Desai, R.J.*, +, *TNS June 2020 1076-1085*

Qualification of a New Differential Calorimeter Configuration Dedicated to Nuclear Heating Rates up to 20 W.g⁻¹. *Volte, A.*, +, *TNS Nov. 2020 2405-2414*

Fission reactor design

Evaluation of Low Dose Silicon Carbide Temperature Monitors. *Davis, K.L.*, +, *TNS April 2020 585-591*

Integral Sliding Mode for Power Distribution Control of Advanced Heavy Water Reactor. *Desai, R.J.*, +, *TNS June 2020 1076-1085*

Qualification of a New Differential Calorimeter Configuration Dedicated to Nuclear Heating Rates up to 20 W.g⁻¹. *Volte, A.*, +, *TNS Nov. 2020 2405-2414*

Fission reactor fuel

Evaluation of Low Dose Silicon Carbide Temperature Monitors. *Davis, K.L.*, +, *TNS April 2020 585-591*

Qualification of a New Differential Calorimeter Configuration Dedicated to Nuclear Heating Rates up to 20 W.g⁻¹. *Volte, A.*, +, *TNS Nov. 2020 2405-2414*

Fission reactor fuel claddings

High-Temperature Measurements With a Fabry–Perot Extensometer. *Chey-mol, G.*, +, *TNS April 2020 552-558*

Fission reactor instrumentation

A mm³ Fiber-Coupled Scintillator for In-Core Thermal Neutron Detection in CROCUS. *Vitullo, F.*, +, *TNS April 2020 625-635*

Gamma-Heating and Gamma Flux Measurements in the JSI TRIGA Reactor: Results and Prospects. *Gruel, A.*, +, *TNS April 2020 559-567*

High-Temperature Measurements With a Fabry–Perot Extensometer. *Chey-mol, G.*, +, *TNS April 2020 552-558*

Nuclear Heating Measurements by Gamma and Neutron Thermometers. *Van Nieuwenhove, R.*, +, *TNS Sept. 2020 2073-2080*

Qualification of a New Differential Calorimeter Configuration Dedicated to Nuclear Heating Rates up to 20 W.g⁻¹. *Volte, A.*, +, *TNS Nov. 2020 2405-2414*

Fission reactor safety

Cascaded HTGR Power-Level Control Only by Regulating Primary Helium Flow Rate. *Dong, Z.*, +, *TNS Aug. 2020 1780-1790*

Fission reactors

Simultaneous Estimation of Neutron Flux and Reactivity in Nuclear Reactors. *Mishra, A.K.*, +, *TNS Aug. 2020 1791-1802*

Fission research reactors

A mm³ Fiber-Coupled Scintillator for In-Core Thermal Neutron Detection in CROCUS. *Vitullo, F.*, +, *TNS April 2020 625-635*

Estimation of Residual Radioactivity and Radiation Damage in SiC After Neutron Irradiation. *Lee, K.*, +, *TNS July 2020 1374-1380*

Evaluation of Low Dose Silicon Carbide Temperature Monitors. *Davis, K.L.*, +, *TNS April 2020 585-591*

Gamma-Heating and Gamma Flux Measurements in the JSI TRIGA Reactor: Results and Prospects. *Gruel, A.*, +, *TNS April 2020 559-567*

Nuclear Heating Measurements by Gamma and Neutron Thermometers. *Van Nieuwenhove, R.*, +, *TNS Sept. 2020 2073-2080*

Qualification of a New Differential Calorimeter Configuration Dedicated to Nuclear Heating Rates up to 20 W.g⁻¹. *Volte, A.*, +, *TNS Nov. 2020 2405-2414*

Flames

In Situ Gas Monitoring by Fiber-Coupled Raman Spectrometry for H₂-Risk Management in Nuclear Containment During a Severe Nuclear Accident. *Magne, S.*, +, *TNS April 2020 617-624*

Flash memories

A Heavy-Ion Detector Based on 3-D NAND Flash Memories. *Bagatin, M.*, +, *TNS Jan. 2020 154-160*

Layer-Dependent Bit Error Variation in 3-D NAND Flash Under Ionizing Radiation. *Kumari, P.*, +, *TNS Sept. 2020 2021-2027*

Reliability Analysis of Ethernet-Based Solutions for Data Transmission in the CERN Radiation Environment. *Gnemmi, G.*, +, *TNS July 2020 1614-1622*

Flavor model

The Mu2e e.m. Calorimeter: Crystals and SiPMs Production Status. *Ananov, N.*, +, *TNS June 2020 978-982*

Flip-flops

DFF Layout Variations in CMOS SOI—Analysis of Hardening by Design Options. *Black, J.D.*, +, *TNS June 2020 1125-1132*

Evaluation of Soft-Error Tolerance by Neutrons and Heavy Ions on Flip Flops With Guard Gates in a 65-nm Thin BOX FDSOI Process. *Ebara, M.*, +, *TNS July 2020 1470-1477*

Improving Selective Fault Tolerance in GPU Register Files by Relaxing Application Accuracy. *Goncalves, M.M.*, +, *TNS July 2020 1573-1580*

Multiple Layout-Hardening Comparison of SEU-Mitigated Flip-Flops in 22-nm UTBB FD-SOI Technology. *Cai, C.*, +, *TNS Jan. 2020 374-381*

SE Response of Guard-Gate FF in 16- and 7-nm Bulk FinFET Technologies. *Cao, J.*, +, *TNS July 2020 1436-1442*

Single Event Upsets Under 14-MeV Neutrons in a 28-nm SRAM-Based FPGA in Static Mode. *Fabero, J.C.*, +, *TNS July 2020 1461-1469*

Fluorescence

Characterization of Uranium Ore Samples by HPGe Gamma-Ray Spectroscopy. *Marchais, T.*, +, *TNS April 2020 654-661*

Colloidal Quantum Dot-Doped Optical Fibers for Scintillation Dosimetry. *Whittaker, C.*, +, *TNS June 2020 1040-1044*

Selective Isotope CT Imaging Based on Nuclear Resonance Fluorescence Transmission Method. *Ali, K.*, +, *TNS Aug. 2020 1976-1984*

Study on the Time Response of a Barium Fluoride Scintillation Detector for Fast Pulse Radiation Detection. *Chen, X.*, +, *TNS Aug. 2020 1893-1898*

The Quenching Effect of BGO Crystals on Relativistic Heavy Ions in the DAMPE Experiment. *Wei, Y.*, +, *TNS June 2020 939-945*

X-Ray Detection Capabilities of Plastic Scintillators Incorporated With ZrO₂ Nanoparticles. *Toda, A.*, +, *TNS June 2020 983-987*

X-Ray Fluorescence Imaging Based on CdTe Detector Array for Analysis of Various Materials. *Jo, A.*, +, *TNS Dec. 2020 2523-2534*

Fluorine

Radiation Resistance of Single-Mode Optical Fibers at $\lambda = 1.55 \mu\text{m}$ Under Irradiation at IVG.1M Nuclear Reactor. *Kashaykin, P.F.*, +, *TNS Oct. 2020 2162-2171*

Radiation Response of Distributed Feedback Bragg Gratings for Space Applications. *Morana, A.*, +, *TNS Jan. 2020 284-288*

Formal verification

Qualification of Hardware Description Language Designs for Safety Critical Applications in Nuclear Power Plants. *John, A.K.*, +, *TNS March 2020 502-507*

Fourier transform infrared spectra

Crystal Growth and Scintillation Properties of Carbazole for Neutron Detection. *Yamaji, A.*, +, *TNS June 2020 1027-1031*

Free electron lasers

Continuous Wave Operation of Superconducting Accelerating Cavities With High Loaded Quality Factor. *Cichalewski, W.*, +, *TNS Sept. 2020 2119-2127*

Phase Drift Compensating RF Link for Femtosecond Synchronization of E-XFEL. *Sikora, D.*, +, *TNS Sept. 2020 2136-2142*

Free energy

Performance of Perovskite CsPbBr₃ Single Crystal Detector for Gamma-Ray Detection. *Pan, L.*, +, *TNS Feb. 2020 443-449*

Frenkel defects

A Survey of the Analytical Methods of Proton-NIEL Calculations in Silicon and Germanium. *Akkerman, A.*, +, *TNS Aug. 2020 1813-1825*

Frequency response

Response of Waveguide-Integrated Germanium-on-Silicon p-i-n Photodiodes to Neutron Displacement Damage. *Goley, P.S.*, +, *TNS Jan. 2020 296-304*

Fusion reactor diverters

Study of the Data Acquisition System for ITER Divertor Neutron Flux Monitor Diagnostic. *Fedorov, V.A.*, +, *TNS April 2020 688-693*

Fusion reactor instrumentation

Study of the Data Acquisition System for ITER Divertor Neutron Flux Monitor Diagnostic. *Fedorov, V.A.*, +, *TNS April 2020 688-693*

Fusion reactor theory

Study of the Data Acquisition System for ITER Divertor Neutron Flux Monitor Diagnostic. *Fedorov, V.A.*, +, *TNS April 2020 688-693*

G**Gadolinium compounds**

A Plutonium Mass Uncertainty Assessment Using a Cherenkov-Based Neutron Multiplicity Water Detector. *Asghari, A.*, +, *TNS Nov. 2020 2431-2438*
Band Gap Variation and Trap Distribution in Transparent Garnet Scintillator Ceramics. *Wieczorek, H.*, +, *TNS Aug. 2020 1934-1945*

Bulk Single Crystal Growth of W Co-Doped Ce:Gd₃Ga₃Al₂O₁₂ by Czochralski Method. *Ueno, M.*, +, *TNS June 2020 1045-1048*

Composite Scintillators Based on the Films and Crystals of (Lu,Gd,La)-₂Si₂O₇ Pyrosilicates. *Kurosawa, S.*, +, *TNS June 2020 994-998*

Light Yield and Timing Characteristics of Lu_{0.8}Gd_{2.2}(Al_{5-x}Gax)O₁₂:Ce,Mg Single Crystals. *Sakthong, O.*, +, *TNS Oct. 2020 2295-2299*

Luminescence and Scintillation Properties of Mg²⁺-Codoped Lu_{0.6}Gd_{2.4}Al₂Ga₃O₁₂:Ce Single Crystal. *Chewpraditkul, W.*, +, *TNS June 2020 904-909*

Optimizing the Sensitivity of a GAGG:Ce-Based Thermal Neutron Detector. *Taggart, M.P.*, +, *TNS April 2020 603-608*

Scintillation Characteristics of Mg²⁺-Codoped Y_{0.8}Gd_{2.2}(Al_{5-x}Gax)O₁₂:Ce Single Crystals. *Chewpraditkul, W.*, +, *TNS June 2020 910-914*

Scintillation Properties and Energy Transfer in (GdY)AlO₃:Ce³⁺ Perovskites With High Gd Content. *Kucera, M.*, +, *TNS June 2020 1049-1054*

Thermal Neutron Discrimination Using a Novel Phoswich Detector of Gd₃Ga₃Al₂O₁₂:Ce,B and CsI:Tl Single Crystals. *Kalyani, .*, +, *TNS Nov. 2020 2415-2420*

Galactic cosmic rays

A Solid-State Microdosimeter for Dose and Radiation Quality Monitoring for Astronauts in Space. *Peracchi, S.*, +, *TNS Jan. 2020 169-174*

Risk Methodology for SEE Caused by Proton- Induced Fission of High-Z Materials in Microelectronic Packaging. *Ladbury, R.*, *TNS June 2020 1152-1160*

Simulating Charge Deposition by Cosmic Rays Inside Astronomical Imaging Detectors. *Lucsanyi, D.*, +, *TNS July 2020 1623-1628*

Gallium arsenide

In Situ Deep-Level Transient Spectroscopy and Dark Current Measurements of Proton-Irradiated InGaAs Photodiodes. *Nelson, G.T.*, +, *TNS Sept. 2020 2051-2061*

Atmospheric Neutron Radiation Response of III-V Binary Compound Semiconductors. *Autran, J.*, +, *TNS July 2020 1428-1435*

COTS Optocoupler Radiation Qualification Process for LHC Applications Based on Mixed-Field Irradiations. *Ferraro, R.*, +, *TNS July 2020 1395-1403*

Displacement Damage Effects in InGaAs Photodiodes due to Electron, Proton, and Neutron Irradiations. *Nuns, T.*, +, *TNS July 2020 1263-1272*

Displacement Damage Effects Mitigation Approach for Heterojunction Bipolar Transistor Frequency Synthesizers. *Sotskov, D.I.*, +, *TNS Nov. 2020 2396-2404*

Modeling Photocathode Performance Using MedeA-VASP Simulation Software. *Williams, J.O.D.*, +, *TNS Sept. 2020 1987-1992*

Photocurrent From Single Collision 14-MeV Neutrons in GaN and GaAs. *Jasica, M.J.*, +, *TNS Jan. 2020 221-227*

Total-Ionizing-Dose Effects and Low-Frequency Noise in 16-nm InGaAs FinFETs With HfO₂/Al₂O₃ Dielectrics. *Bonaldo, S.*, +, *TNS Jan. 2020 210-220*

Total-Ionizing-Dose Effects in InGaAs MOSFETs With High-*k* Gate Dielectrics and InP Substrates. *Bonaldo, S.*, +, *TNS July 2020 1312-1319*

Total-Ionizing-Dose Effects on InGaAs FinFETs With Modified Gate-stack. *Zhao, S.E.*, +, *TNS Jan. 2020 253-259*

Gallium compounds

A Photomultiplier With an AlGaN Photocathode and Microchannel Plates for BaF₂ Scintillator Detectors in Particle Physics. *Atanov, N.*, +, *TNS July 2020 1760-1764*

Atmospheric Neutron Radiation Response of III-V Binary Compound Semiconductors. *Autran, J.*, +, *TNS July 2020 1428-1435*

Bulk Single Crystal Growth of W Co-Doped Ce:Gd₃Ga₃Al₂O₁₂ by Czochralski Method. *Ueno, M.*, +, *TNS June 2020 1045-1048*

Comparison of X-Ray and Proton Irradiation Effects on the Characteristics of InGaN/GaN Multiple Quantum Wells Light-Emitting Diodes. *Wang, L.*, +, *TNS July 2020 1345-1350*

High-Fluence Proton-Induced Degradation on AlGaIn/GaN High-Electron-Mobility Transistors. *Yue, S.*, +, *TNS July 2020 1339-1344*

Mechanism Analysis of Proton Irradiation-Induced Increase of 3-dB Bandwidth of GaN-Based Microlight-Emitting Diodes for Space Light Communication. *Wang, L.*, +, *TNS July 2020 1360-1364*

Optical Properties of InGaIn/GaN Multiple Quantum Well Structures Grown on GaN and Sapphire Substrates. *Jary, V.*, +, *TNS June 2020 974-977*

Photocurrent From Single Collision 14-MeV Neutrons in GaN and GaAs. *Jasica, M.J.*, +, *TNS Jan. 2020 221-227*

Scintillation Properties of β-Ga₂O₃ Single Crystal Excited by α-Ray. *He, N.*, +, *TNS Jan. 2020 400-404*

Thermal Neutron Discrimination Using a Novel Phoswich Detector of Gd₃Ga₃Al₂O₁₂:Ce,B and CsI:Tl Single Crystals. *Kalyani, .*, +, *TNS Nov. 2020 2415-2420*

Gamma-ray apparatus

Development of a 3-D Scintillator Detector for Compton Imaging Based on Laser Engraving. *Zhang, J.*, +, *TNS July 2020 1691-1698*

Gamma-ray detection

A Confident Configuration for an Environmental Radiation Monitoring System. *Hung, D.T.*, +, *TNS Oct. 2020 2224-2230*

A mm³ Fiber-Coupled Scintillator for In-Core Thermal Neutron Detection in CROCUS. *Vitulo, F.*, +, *TNS April 2020 625-635*

Artifacts in High-Energy Compton Imaging With 3-D Position-Sensitive CdZnTe. *Shy, D.*, +, *TNS Aug. 2020 1920-1928*

Automatic and Real-Time Identification of Radionuclides in Gamma-Ray Spectra: A New Method Based on Convolutional Neural Network Trained With Synthetic Data Set. *Daniel, G.*, +, *TNS April 2020 644-653*

Characterization of CLLBC Coupled to Silicon Photomultipliers. *Liang, F.*, +, *TNS June 2020 927-932*

Characterization of Uranium Ore Samples by HPGe Gamma-Ray Spectroscopy. *Marchais, T.*, +, *TNS April 2020 654-661*

Collimator-Less Passive Gamma Scanning for Radioactive Waste Drums. *Vax, E.*, +, *TNS April 2020 544-551*

Comparison Between Silicon Carbide and Diamond for Thermal Neutron Detection at Room Temperature. *Obraztsova, O.*, +, *TNS May 2020 863-871*

Comparison of Zr, Bi, Ti, and Ga as Metal Contacts in Inorganic Perovskite CsPbBr₃ Gamma-Ray Detector. *Pan, L.*, +, *TNS Oct. 2020 2255-2262*

Detector Upgrade for Fast MeV X-Ray Imaging for Severe Accidents Experiments. *Tisseur, D.*, +, *TNS July 2020 1715-1721*

Development of a 3-D Scintillator Detector for Compton Imaging Based on Laser Engraving. *Zhang, J.*, +, *TNS July 2020 1691-1698*

Development of Gamma-Ray Detector Arrays Consisting of Diced Eu-Doped SrI₂ Scintillator Arrays and TSV-MPPC Arrays. *Yoshino, M.*, +, *TNS June 2020 999-1002*

Effect of the Electric Field Strength on the Energy Resolution of Cr/CdTe/Pt Detectors. *Sklyarchuk, V.*, +, *TNS Nov. 2020 2439-2444*

Energy Resolution of Scintillators in Connection With Track Structure. *Gekhtin, A.*, +, *TNS June 2020 880-887*

Gamma-Heating and Gamma Flux Measurements in the JSI TRIGA Reactor: Results and Prospects. *Gruel, A.*, +, *TNS April 2020 559-567*

Growth and Scintillation Properties of a New Red-Emitting Scintillator Rb₂HfI₆ for the Fiber-Reading Radiation Monitor. *Kodama, S.*, +, *TNS June 2020 1055-1062*

- Growth of Large-Area $\text{Cd}_{0.9}\text{Zn}_{0.1}\text{Te}$ Single Crystals and Fabrication of Pixelated Guard-Ring Detector for Room-Temperature γ -Ray Detection. *Sajjad, M.*, +, *TNS Aug. 2020 1946-1951*
- High-Resolution Gamma Spectrometry of a Plutonium Bearing Waste Drum With High-Energy Reaction-Induced Gamma Rays. *Bottau, V.*, +, *TNS April 2020 575-584*
- High-Temperature Diamond Detector for Neutron Generator Output Monitoring in Well Logging Applications. *Anniyev, T.*, +, *TNS Aug. 2020 1885-1892*
- Latest Progress on Advanced Bridgman Method-Grown K_2PtCl_6 Cubic Structure Scintillator Crystals. *Hawrami, R.*, +, *TNS June 2020 1020-1026*
- Modeling Aerial Gamma-Ray Backgrounds Using Non-negative Matrix Factorization. *Bandstra, M.S.*, +, *TNS May 2020 777-790*
- Monte Carlo Calculations of the Detection Efficiency of Composite Scintillator Arrays for Fast and Moderated Neutrons, and for Gamma-Ray Spectroscopy. *Derenzo, S.E.*, +, *TNS June 2020 888-893*
- Neutron-Induced Radiation Damage in LYSO, BaF_2 , and PWO Crystals. *Hu, C.*, +, *TNS June 2020 1086-1092*
- Onset of Fogging and Degradation in Polyvinyl Toluene-Based Scintillators. *Rose, P.B.*, +, *TNS July 2020 1765-1771*
- Optical and Scintillation Properties of Hf^{3+} Codoped $\text{SrI}_2:\text{Eu}^{2+}$ Single Crystals. *Wang, S.*, +, *TNS June 2020 876-879*
- Optimization of the Charge Comparison Method for Multiradiation Field Using Various Measurement Systems. *Lynde, C.*, +, *TNS April 2020 679-687*
- Optimizing the Sensitivity of a GAGG:Ce-Based Thermal Neutron Detector. *Taggart, M.P.*, +, *TNS April 2020 603-608*
- Performance Assessment of Amplification and Discrimination Electronic Devices for Passive Neutron Measurements. *Ben Mosbah, M.*, +, *TNS April 2020 662-668*
- Performance of Perovskite CsPbBr_3 Single Crystal Detector for Gamma-Ray Detection. *Pan, L.*, +, *TNS Feb. 2020 443-449*
- Pile-Up Correction in Spectroscopic Signals Using Regularized Sparse Reconstruction. *Kafae, M.*, +, *TNS May 2020 858-862*
- Reconstructing the Position and Intensity of Multiple Gamma-Ray Point Sources With a Sparse Parametric Algorithm. *Vavrek, J.R.*, +, *TNS Nov. 2020 2421-2430*
- Reducing NaI(Tl) Detector Spectrum Shift by Optimizing Pulse Integration Time. *Wei, Q.*, +, *TNS Feb. 2020 450-454*
- Response of the BGO Calorimeter to Cosmic-Ray Nuclei in the DAMPE Experiment on Orbit. *Dai, H.T.*, +, *TNS June 2020 956-961*
- Scintillation Characteristics of Mg^{2+} -Codoped $\text{Y}_{0.8}\text{Gd}_{0.2}(\text{Al}_{1-x}\text{Ga}_x)\text{O}_{12}:\text{Ce}$ Single Crystals. *Chewpraditkul, W.*, +, *TNS June 2020 910-914*
- Selective Isotope CT Imaging Based on Nuclear Resonance Fluorescence Transmission Method. *Ali, K.*, +, *TNS Aug. 2020 1976-1984*
- Silver-Doped LiI Crystal: A Sensitive Thermal Neutron Detector With Pulse Shape Discrimination. *Vuong, P.Q.*, +, *TNS Oct. 2020 2290-2294*
- Thermal Characterization of $\text{Tl}_2\text{LiYCl}_6:\text{Ce}$ (TLYC). *Watts, M.M.*, +, *TNS March 2020 525-533*
- Time Resolution Measurements of EJ-232Q With Single- and Dual-Sided Readouts. *Wen, X.*, +, *TNS Sept. 2020 2081-2088*
- Time-Encoded Gamma-Ray Imaging Using a 3-D Position-Sensitive CdZnTe Detector Array. *Brown, S.T.*, +, *TNS Feb. 2020 464-472*
- Tl_2ZrCl_6 and Tl_2HfCl_6 Intrinsic Scintillators for Gamma Rays and Fast Neutron Detection. *Bhattacharya, P.*, +, *TNS June 2020 1032-1034*
- Gamma-ray effects**
- A Radiation-Hardened CMOS Image Sensor With Pixels Exhibiting a Negligibly Small Dark-Level Increase During Ionizing Radiation. *Watanabe, T.*, +, *TNS Aug. 2020 1835-1845*
- A Radiation-Hardened Dual-Direction SCR Based on LDMOS for ESD Protection in the Extreme Radiation Environment. *Wu, M.*, +, *TNS April 2020 708-715*
- A Study on Ionization Damage Effects of Anode-Short MOS-Controlled Thyristor. *Li, L.*, +, *TNS Sept. 2020 2062-2072*
- A Survey of the Analytical Methods of Proton-NIEL Calculations in Silicon and Germanium. *Akkerman, A.*, +, *TNS Aug. 2020 1813-1825*
- Comparison Between Silicon Carbide and Diamond for Thermal Neutron Detection at Room Temperature. *Obraztsova, O.*, +, *TNS May 2020 863-871*
- Crystal Growth and Scintillation Properties of Carbazole for Neutron Detection. *Yamaji, A.*, +, *TNS June 2020 1027-1031*
- Gamma-Heating and Gamma Flux Measurements in the JSI TRIGA Reactor: Results and Prospects. *Gruel, A.*, +, *TNS April 2020 559-567*
- Improved Model for Ionization-Induced Surface Recombination Current in p-n-p BJTs. *Li, L.*, +, *TNS Aug. 2020 1826-1834*
- Irradiation Tests of Optical Fibers and Cables Devoted to Corium Monitoring in Case of a Severe Accident in a Nuclear Power Plant. *Cheymol, G.*, +, *TNS April 2020 669-678*
- Layer-Dependent Bit Error Variation in 3-D NAND Flash Under Ionizing Radiation. *Kumari, P.*, +, *TNS Sept. 2020 2021-2027*
- On-Chip Total Ionizing Dose Digital Monitor in Fully Depleted SOI Technologies. *Abouzeid, F.*, +, *TNS July 2020 1326-1331*
- Proton and Gamma Radiation Effects on a Fully Depleted Pinned Photodiode CMOS Image Sensor. *Meng, X.*, +, *TNS June 2020 1107-1113*
- Radiation-Induced Variable Retention Time in Dynamic Random Access Memories. *Goiffon, V.*, +, *TNS Jan. 2020 234-244*
- Sensitivity of Silicon Photomultipliers to Direct Gamma Ray Irradiation. *Lavelle, C.M.*, +, *TNS Jan. 2020 389-399*
- Transient and Steady-State Radiation Response of Phosphosilicate Optical Fibers: Influence of H_2 Loading. *Girard, S.*, +, *TNS Jan. 2020 289-295*
- Gamma-ray spectra**
- Automatic and Real-Time Identification of Radionuclides in Gamma-Ray Spectra: A New Method Based on Convolutional Neural Network Trained With Synthetic Data Set. *Daniel, G.*, +, *TNS April 2020 644-653*
- Characterization of Uranium Ore Samples by HPGe Gamma-Ray Spectroscopy. *Marchais, T.*, +, *TNS April 2020 654-661*
- High-Resolution Gamma Spectrometry of a Plutonium Bearing Waste Drum With High-Energy Reaction-Induced Gamma Rays. *Bottau, V.*, +, *TNS April 2020 575-584*
- Modeling Aerial Gamma-Ray Backgrounds Using Non-negative Matrix Factorization. *Bandstra, M.S.*, +, *TNS May 2020 777-790*
- Monte Carlo Calculations of the Detection Efficiency of Composite Scintillator Arrays for Fast and Moderated Neutrons, and for Gamma-Ray Spectroscopy. *Derenzo, S.E.*, +, *TNS June 2020 888-893*
- Performance of Perovskite CsPbBr_3 Single Crystal Detector for Gamma-Ray Detection. *Pan, L.*, +, *TNS Feb. 2020 443-449*
- Gamma-ray spectrometers**
- A Confident Configuration for an Environmental Radiation Monitoring System. *Hung, D.T.*, +, *TNS Oct. 2020 2224-2230*
- CdZnTe -Based X-Ray Spectrometer for Absolute Density Determination. *Zambelli, N.*, +, *TNS Oct. 2020 2273-2277*
- Performance of Perovskite CsPbBr_3 Single Crystal Detector for Gamma-Ray Detection. *Pan, L.*, +, *TNS Feb. 2020 443-449*
- Reconstructing the Position and Intensity of Multiple Gamma-Ray Point Sources With a Sparse Parametric Algorithm. *Vavrek, J.R.*, +, *TNS Nov. 2020 2421-2430*
- Gamma-ray spectroscopy**
- Characterization of Uranium Ore Samples by HPGe Gamma-Ray Spectroscopy. *Marchais, T.*, +, *TNS April 2020 654-661*
- High-Resolution Gamma Spectrometry of a Plutonium Bearing Waste Drum With High-Energy Reaction-Induced Gamma Rays. *Bottau, V.*, +, *TNS April 2020 575-584*
- Monte Carlo Calculations of the Detection Efficiency of Composite Scintillator Arrays for Fast and Moderated Neutrons, and for Gamma-Ray Spectroscopy. *Derenzo, S.E.*, +, *TNS June 2020 888-893*
- Optical and Scintillation Properties of Hf^{3+} Codoped $\text{SrI}_2:\text{Eu}^{2+}$ Single Crystals. *Wang, S.*, +, *TNS June 2020 876-879*
- Performance of High Stopping Power Bismuth-Loaded Plastic Scintillators for Radiation Portal Monitors. *O'Neal, S.*, +, *TNS April 2020 746-751*
- Performance of Perovskite CsPbBr_3 Single Crystal Detector for Gamma-Ray Detection. *Pan, L.*, +, *TNS Feb. 2020 443-449*
- Pile-Up Correction in Spectroscopic Signals Using Regularized Sparse Reconstruction. *Kafae, M.*, +, *TNS May 2020 858-862*

Gamma-rays

Simulation of High-Altitude Nuclear Electromagnetic Pulse Using a Modified Model of Scattered Gamma. *Li, Y.*, +, *TNS Dec. 2020 2474-2480*

Garnets

Band Gap Variation and Trap Distribution in Transparent Garnet Scintillator Ceramics. *Wieczorek, H.*, +, *TNS Aug. 2020 1934-1945*

Luminescent Nanocomposites for Biomedical Applications. *Popovich, K.*, +, *TNS June 2020 962-968*

Optimizing the Sensitivity of a GAGG:Ce-Based Thermal Neutron Detector. *Taggart, M.P.*, +, *TNS April 2020 603-608*

Gas cooled reactors

Cascaded HTGR Power-Level Control Only by Regulating Primary Helium Flow Rate. *Dong, Z.*, +, *TNS Aug. 2020 1780-1790*

Ge-Si alloys

Comparison of Single-Event Transients in SiGe HBTs on Bulk and Thick-Film SOL. *Ildefonso, A.*, +, *TNS Jan. 2020 71-80*

Electronic-to-Photonic Single-Event Transient Propagation in a Segmented Mach-Zehnder Modulator in a Si/SiGe Integrated Photonics Platform. *Tzintzarov, G.N.*, +, *TNS Jan. 2020 260-267*

Simulation of Single Particle Displacement Damage in Si_{1-x}Ge_x Alloys—Interaction of Primary Particles With the Material and Generation of the Damage Structure. *Jarrin, T.*, +, *TNS July 2020 1273-1283*

Single-Event Transients in SiGe HBTs Induced by Pulsed X-Ray Microbeam. *Nergui, D.*, +, *TNS Jan. 2020 91-98*

Tradeoffs Between RF Performance and SET Robustness in Low-Noise Amplifiers in a Complementary SiGe BiCMOS Platform. *Ildefonso, A.*, +, *TNS July 2020 1521-1529*

Geiger counters

Improving the Geiger Muller Counter Characteristics by Optimizing the Anode and Cathode Radius Dimensions. *Arbutina, D.*, +, *TNS Oct. 2020 2231-2237*

Geometrical optics

DCR Performance in Neutron-Irradiated CMOS SPADs From 150- to 180-nm Technologies. *Ratti, L.*, +, *TNS July 2020 1293-1301*

Geometry

Design and Analytical Evaluation of a New Ion Collection Geometry for Improvement in Quantity and Quality of Product During Laser Isotope Separation. *Dikshit, B.*, +, *TNS Dec. 2020 2465-2473*

Geophysical prospecting

Modeling Aerial Gamma-Ray Backgrounds Using Non-negative Matrix Factorization. *Bandstra, M.S.*, +, *TNS May 2020 777-790*

Germanium

A Survey of the Analytical Methods of Proton-NIEL Calculations in Silicon and Germanium. *Akkerman, A.*, +, *TNS Aug. 2020 1813-1825*

Combined Temperature and Radiation Effects on Radiation-Sensitive Single-Mode Optical Fibers. *Campanella, C.*, +, *TNS July 2020 1643-1649*

Hexagonal Pad Multichannel Ge X-Ray Spectroscopy Detector Demonstrator: Comprehensive Characterization. *Tartoni, N.*, +, *TNS Aug. 2020 1952-1961*

Radiation Response of Distributed Feedback Bragg Gratings for Space Applications. *Morana, A.*, +, *TNS Jan. 2020 284-288*

Response of Waveguide-Integrated Germanium-on-Silicon p-i-n Photodiodes to Neutron Displacement Damage. *Goley, P.S.*, +, *TNS Jan. 2020 296-304*

Steady-State X-Ray Radiation-Induced Attenuation in Canonical Optical Fibers. *De Michele, V.*, +, *TNS July 2020 1650-1657*

Germanium radiation detectors

Characterization of Uranium Ore Samples by HPGe Gamma-Ray Spectroscopy. *Marchais, T.*, +, *TNS April 2020 654-661*

Determination of Uranium Enrichment Using a Plastic Scintillator. *Kim, Y.*, +, *TNS April 2020 592-598*

Hexagonal Pad Multichannel Ge X-Ray Spectroscopy Detector Demonstrator: Comprehensive Characterization. *Tartoni, N.*, +, *TNS Aug. 2020 1952-1961*

Glass

Investigation of Thermoluminescence Properties of Potential Fibered-OSL Dosimeter Materials. *Benabdesselam, M.*, +, *TNS July 2020 1663-1668*

Remote Measurements of X-Rays Dose Rate Using a Cerium-Doped Air-Clad Optical Fiber. *Bahout, J.*, +, *TNS July 2020 1658-1662*

Glass fibers

Radiation Effects on WDM and DWDM Architectures of Preamplifier and Boost-Amplifier. *Aubry, M.*, +, *TNS Jan. 2020 278-283*

Glazes

X-Ray Fluorescence Imaging Based on CdTe Detector Array for Analysis of Various Materials. *Jo, A.*, +, *TNS Dec. 2020 2523-2534*

Global Positioning System

Gamma-Ray Source Detection Under Occlusions and Position Errors in Cluttered Urban Scenes. *Miller, K.*, +, *TNS June 2020 1185-1194*

Gold

Compton Background Elimination for in Vivo X-Ray Fluorescence Imaging of Gold Nanoparticles Using Convolutional Neural Network. *Jung, S.*, +, *TNS Nov. 2020 2311-2320*

Gradient methods

Total Ionizing Dose Effects in 30-V Split-Gate Trench VDMOS. *Wang, R.*, +, *TNS Sept. 2020 2009-2014*

Graphics processing units

High-Energy Versus Thermal Neutron Contribution to Processor and Memory Error Rates. *Oliveira, D.*, +, *TNS June 2020 1161-1168*

Impact of Tensor Cores and Mixed Precision on the Reliability of Matrix Multiplication in GPUs. *Basso, P.M.*, +, *TNS July 2020 1560-1565*

Improving Selective Fault Tolerance in GPU Register Files by Relaxing Application Accuracy. *Goncalves, M.M.*, +, *TNS July 2020 1573-1580*

Gunn effect

Effect of the Electric Field Strength on the Energy Resolution of Cr/CdTe/Pt Detectors. *Sklyarchuk, V.*, +, *TNS Nov. 2020 2439-2444*

H**Hafnium compounds**

Total-Ionizing-Dose Effects and Low-Frequency Noise in 16-nm InGaAs FinFETs With HfO₂/Al₂O₃ Dielectrics. *Bonaldo, S.*, +, *TNS Jan. 2020 210-220*

Total-Ionizing-Dose Effects and Low-Frequency Noise in 30-nm Gate-Length Bulk and SOI FinFETs With SiO₂/HfO₂ Gate Dielectrics. *Gorchichko, M.*, +, *TNS Jan. 2020 245-252*

Total-Ionizing-Dose Effects on InGaAs FinFETs With Modified Gate-stack. *Zhao, S.E.*, +, *TNS Jan. 2020 253-259*

Hall effect

Comparison of X-Ray and Proton Irradiation Effects on the Characteristics of InGaN/GaN Multiple Quantum Wells Light-Emitting Diodes. *Wang, L.*, +, *TNS July 2020 1345-1350*

Hardware

Application of Binocular Stereo Vision in Radioactive Source Image Reconstruction and Multimodal Imaging Fusion. *Li, Y.*, +, *TNS Nov. 2020 2454-2462*

Hardware description languages

Qualification of Hardware Description Language Designs for Safety Critical Applications in Nuclear Power Plants. *John, A.K.*, +, *TNS March 2020 502-507*

Heat treatment

Role of Chemical Substitution in the Photoluminescence Properties of Cerium Samarium Tungstates Ce_(2-x)Sm_x(WO₄)₃ (0 ≤ x ≤ 0.3). *Derraji, K.*, +, *TNS April 2020 568-574*

Heavy ion fusion reactions

Heavy Ion Nuclear Reaction Impact on SEE Testing: From Standard to Ultra-high Energies. *Wyrwoll, V.*, +, *TNS July 2020 1590-1598*

Heavy ion-nucleus reactions

Method for System-Level Testing of COTS Electronic Board Under High-Energy Heavy Ions. *de Bibikoff, A.*, +, *TNS Oct. 2020 2179-2187*

Heavy water reactors

Integral Sliding Mode for Power Distribution Control of Advanced Heavy Water Reactor. *Desai, R.J.*, +, *TNS June 2020 1076-1085*

Helium

Cascaded HTGR Power-Level Control Only by Regulating Primary Helium Flow Rate. *Dong, Z.*, +, *TNS Aug. 2020 1780-1790*

Helium-3 counters

- A Plutonium Mass Uncertainty Assessment Using a Cherenkov-Based Neutron Multiplicity Water Detector. *Asghari, A.*, +, *TNS Nov. 2020 2431-2438*
- High-Resolution Gamma Spectrometry of a Plutonium Bearing Waste Drum With High-Energy Reaction-Induced Gamma Rays. *Bottau, V.*, +, *TNS April 2020 575-584*
- Performance Assessment of Amplification and Discrimination Electronic Devices for Passive Neutron Measurements. *Ben Mosbah, M.*, +, *TNS April 2020 662-668*
- Performance of a Position-Sensitive Neutron Scintillation Detector Based on Silicon Photomultipliers. *Kumar, S.*, +, *TNS June 2020 1169-1174*

Heterodyne detection

- Phase Drift Compensating RF Link for Femtosecond Synchronization of E-XFEL. *Sikora, D.*, +, *TNS Sept. 2020 2136-2142*

Heterojunction bipolar transistors

- Comparison of Single-Event Transients in SiGe HBTs on Bulk and Thick-Film SOI. *Ildefonso, A.*, +, *TNS Jan. 2020 71-80*
- Displacement Damage Effects Mitigation Approach for Heterojunction Bipolar Transistor Frequency Synthesizers. *Sotskov, D.I.*, +, *TNS Nov. 2020 2396-2404*
- Single-Event Transients in SiGe HBTs Induced by Pulsed X-Ray Microbeam. *Nergui, D.*, +, *TNS Jan. 2020 91-98*
- Tradeoffs Between RF Performance and SET Robustness in Low-Noise Amplifiers in a Complementary SiGe BiCMOS Platform. *Ildefonso, A.*, +, *TNS July 2020 1521-1529*

High electron mobility transistors

- High-Fluence Proton-Induced Degradation on AlGaN/GaN High-Electron-Mobility Transistors. *Yue, S.*, +, *TNS July 2020 1339-1344*
- Total-Ionizing-Dose Effects, Border Traps, and $1/f$ Noise in Emerging MOS Technologies. *Fleetwood, D.M.*, *TNS July 2020 1216-1240*

High energy physics instrumentation computing

- A DAQ Upgrade Solution for Belle II Experiment. *Liu, Z.*, +, *TNS Aug. 2020 1904-1911*
- Design and Performance of Data Acquisition and Control System for the Muon g-2 Laser Calibration. *Mastroianni, S.*, +, *TNS May 2020 832-839*
- Design and Testing of the Address in Real-Time Data Driver Card for the Micromegas Detector of the ATLAS New Small Wheel Upgrade. *Yao, L.*, +, *TNS Sept. 2020 2155-2160*
- Performance Study of the First 2-D Prototype of Vertically Integrated Pattern Recognition Associative Memory. *Deptuch, G.*, +, *TNS Sept. 2020 2111-2118*
- Phase I Upgrade of the Readout System of the Vertex Detector at the LHCb Experiment. *Fernandez Prieto, A.*, +, *TNS April 2020 732-739*
- Real Time Data Analysis With the ATLAS Trigger at the LHC in Run-2. *Beauchemin, P.*, *TNS Sept. 2020 2128-2135*

High-energy elementary particle interactions

- Timepix3 Luminosity Determination of 13-TeV Proton-Proton Collisions at the ATLAS Experiment. *Sopczak, A.*, *TNS April 2020 609-616*

High-k dielectric thin films

- Total-Ionizing-Dose Effects in InGaAs MOSFETs With High- k Gate Dielectrics and InP Substrates. *Bonaldo, S.*, +, *TNS July 2020 1312-1319*
- Total-Ionizing-Dose Effects, Border Traps, and $1/f$ Noise in Emerging MOS Technologies. *Fleetwood, D.M.*, *TNS July 2020 1216-1240*

High-speed optical techniques

- Radiation Response of Distributed Feedback Bragg Gratings for Space Applications. *Morana, A.*, +, *TNS Jan. 2020 284-288*
- Ultrafast Radiative Relaxation Processes in Multication Cross-Luminescence Materials. *Saaring, J.*, +, *TNS June 2020 1009-1013*

High-temperature electronics

- Ionizing-Radiation Response and Low-Frequency Noise of 28-nm MOSFETs at Ultrahigh Doses. *Bonaldo, S.*, +, *TNS July 2020 1302-1311*

Hole mobility

- Comparison of Zr, Bi, Ti, and Ga as Metal Contacts in Inorganic Perovskite CsPbBr₃ Gamma-Ray Detector. *Pan, L.*, +, *TNS Oct. 2020 2255-2262*
- Effects of High-Dose X-Ray Irradiation on the Hole Lifetime in Vacuum-Deposited Stabilized a-Se Photoconductive Films: Implications to the Quality Control of a-Se Used in X-Ray Detectors. *Simonson, B.*, +, *TNS Nov. 2020 2445-2453*

Hole traps

- Evolution of Ionization-Induced Defects in GLPNP Bipolar Transistors at Different Temperatures. *Dong, L.*, +, *TNS Sept. 2020 2003-2008*
- Growth of Large-Area Cd_{0.5}Zn_{0.5}Te Single Crystals and Fabrication of Pixelated Guard-Ring Detector for Room-Temperature γ -Ray Detection. *Sajjad, M.*, +, *TNS Aug. 2020 1946-1951*
- Investigation of Thermoluminescence Properties of Potential Fibered-OSL Dosimeter Materials. *Benabdesselam, M.*, +, *TNS July 2020 1663-1668*
- Radiation-Induced Variable Retention Time in Dynamic Random Access Memories. *Goiffon, V.*, +, *TNS Jan. 2020 234-244*
- TID Response of Nanowire Field-Effect Transistors: Impact of the Back-Gate Bias. *Riffaud, J.*, +, *TNS Oct. 2020 2172-2178*
- Total-Ionizing-Dose Effects and Low-Frequency Noise in 16-nm InGaAs FinFETs With HfO₂/Al₂O₃ Dielectrics. *Bonaldo, S.*, +, *TNS Jan. 2020 210-220*
- Total-Ionizing-Dose Effects in InGaAs MOSFETs With High- k Gate Dielectrics and InP Substrates. *Bonaldo, S.*, +, *TNS July 2020 1312-1319*
- Total-Ionizing-Dose Effects on InGaAs FinFETs With Modified Gate-stack. *Zhao, S.E.*, +, *TNS Jan. 2020 253-259*

Hydrogen

- In Situ* Gas Monitoring by Fiber-Coupled Raman Spectrometry for H₂-Risk Management in Nuclear Containment During a Severe Nuclear Accident. *Magne, S.*, +, *TNS April 2020 617-624*
- Irradiation Tests of Optical Fibers and Cables Devoted to Corium Monitoring in Case of a Severe Accident in a Nuclear Power Plant. *Cheymol, G.*, +, *TNS April 2020 669-678*
- Transient and Steady-State Radiation Response of Phosphosilicate Optical Fibers: Influence of H₂ Loading. *Girard, S.*, +, *TNS Jan. 2020 289-295*

Hydrogen production

- Irradiation Tests of Optical Fibers and Cables Devoted to Corium Monitoring in Case of a Severe Accident in a Nuclear Power Plant. *Cheymol, G.*, +, *TNS April 2020 669-678*

Hyperfine interactions

- Modeling of Near Zero-Field Magnetoresistance and Electrically Detected Magnetic Resonance in Irradiated Si/SiO₂ MOSFETs. *Harmon, N.J.*, +, *TNS July 2020 1669-1673*

I**IEEE publishing**

- List of Reviewers. *TNS July 2020 1202-1203*
- NSREC 2019 Special Issue of the IEEE List of Reviewers. *TNS Jan. 2020 8*

IIR filters

- Least Mean Squares Filters Suppressing the Radio-Frequency Interference in AERA Cosmic Ray Radio Detection. *Szadkowski, Z.*, *TNS Jan. 2020 405-413*

Image classification

- The Impact of Proton-Induced Single Events on Image Classification in a Neuromorphic Computing Architecture. *Brewer, R.M.*, +, *TNS Jan. 2020 108-115*

Image filtering

- Proximity-Based Sensor Fusion of Depth Cameras and Isotropic Rad-Detectors. *Henderson, K.*, +, *TNS May 2020 840-857*

Image fusion

- Proximity-Based Sensor Fusion of Depth Cameras and Isotropic Rad-Detectors. *Henderson, K.*, +, *TNS May 2020 840-857*

Image processing

- X-Ray Fluorescence Imaging Based on CdTe Detector Array for Analysis of Various Materials. *Jo, A.*, +, *TNS Dec. 2020 2523-2534*

Image recognition

- The Impact of Proton-Induced Single Events on Image Classification in a Neuromorphic Computing Architecture. *Brewer, R.M.*, +, *TNS Jan. 2020 108-115*

Image reconstruction

- Application of Binocular Stereo Vision in Radioactive Source Image Reconstruction and Multimodal Imaging Fusion. *Li, Y.*, +, *TNS Nov. 2020 2454-2462*

- Compton Background Elimination for in Vivo X-Ray Fluorescence Imaging of Gold Nanoparticles Using Convolutional Neural Network. *Jung, S.*, +, *TNS Nov. 2020 2311-2320*
- Development of a 3-D Scintillator Detector for Compton Imaging Based on Laser Engraving. *Zhang, J.*, +, *TNS July 2020 1691-1698*
- Development of a Position-Sensitive 4π Compton Camera Based on a Single Segmented Scintillator. *Lee, H.*, +, *TNS Dec. 2020 2511-2522*
- Pile-Up Correction in Spectroscopic Signals Using Regularized Sparse Reconstruction. *Kafaei, M.*, +, *TNS May 2020 858-862*
- ROI-Wise Material Decomposition in Spectral Photon-Counting CT. *Xie, B.*, +, *TNS June 2020 1066-1075*
- Image sensors**
- Development of a 3-D Scintillator Detector for Compton Imaging Based on Laser Engraving. *Zhang, J.*, +, *TNS July 2020 1691-1698*
- Proximity-Based Sensor Fusion of Depth Cameras and Isotropic Rad-Detectors. *Henderson, K.*, +, *TNS May 2020 840-857*
- Impurity distribution**
- Effect of the Electric Field Strength on the Energy Resolution of Cr/CdTe/Pt Detectors. *Sklyarchuk, V.*, +, *TNS Nov. 2020 2439-2444*
- Indium compounds**
- In Situ Deep-Level Transient Spectroscopy and Dark Current Measurements of Proton-Irradiated InGaAs Photodiodes. *Nelson, G.T.*, +, *TNS Sept. 2020 2051-2061*
- Atmospheric Neutron Radiation Response of III-V Binary Compound Semiconductors. *Autran, J.*, +, *TNS July 2020 1428-1435*
- Comparison of X-Ray and Proton Irradiation Effects on the Characteristics of InGaN/GaN Multiple Quantum Wells Light-Emitting Diodes. *Wang, L.*, +, *TNS July 2020 1345-1350*
- COTS Optocoupler Radiation Qualification Process for LHC Applications Based on Mixed-Field Irradiations. *Ferraro, R.*, +, *TNS July 2020 1395-1403*
- Displacement Damage Effects in InGaAs Photodiodes due to Electron, Proton, and Neutron Irradiations. *Nuns, T.*, +, *TNS July 2020 1263-1272*
- Mechanism Analysis of Proton Irradiation-Induced Increase of 3-dB Bandwidth of GaN-Based Microlight-Emitting Diodes for Space Light Communication. *Wang, L.*, +, *TNS July 2020 1360-1364*
- Optical Properties of InGaN/GaN Multiple Quantum Well Structures Grown on GaN and Sapphire Substrates. *Jary, V.*, +, *TNS June 2020 974-977*
- Total-Ionizing-Dose Effects and Low-Frequency Noise in 16-nm InGaAs FinFETs With $\text{HfO}_2/\text{Al}_2\text{O}_3$ Dielectrics. *Bonaldo, S.*, +, *TNS Jan. 2020 210-220*
- Total-Ionizing-Dose Effects in InGaAs MOSFETs With High- k Gate Dielectrics and InP Substrates. *Bonaldo, S.*, +, *TNS July 2020 1312-1319*
- Total-Ionizing-Dose Effects on InGaAs FinFETs With Modified Gate-stack. *Zhao, S.E.*, +, *TNS Jan. 2020 253-259*
- Infrared spectra**
- Influence of Annealing Temperature on the Performance of $\text{Lu}_2\text{O}_3:\text{Eu}^{3+}$ Nanowire Arrays Synthesized by Sol-Gel Method Using AAO Template. *Hu, Y.*, +, *TNS Aug. 2020 1899-1903*
- Transient and Steady-State Radiation Response of Phosphosilicate Optical Fibers: Influence of H_2 Loading. *Girard, S.*, +, *TNS Jan. 2020 289-295*
- Inspection**
- CdZnTe-Based X-Ray Spectrometer for Absolute Density Determination. *Zambelli, N.*, +, *TNS Oct. 2020 2273-2277*
- Insulated gate bipolar transistors**
- Experimental Study on Displacement Damage Effects of Anode-Short MOS-Controlled Thyristor. *Li, L.*, +, *TNS March 2020 508-517*
- Single-Event Effects in Ground-Level Infrastructure During Extreme Ground-Level Enhancements. *Dyer, A.*, +, *TNS June 2020 1139-1143*
- Integrated circuit design**
- Design and Characterizations of the Radiation-Hardened XCR4C ASIC for X-Ray CCDs for Space Astronomical Applications. *Lu, B.*, +, *TNS June 2020 1175-1184*
- Electronic-to-Photonic Single-Event Transient Propagation in a Segmented Mach-Zehnder Modulator in a Si/SiGe Integrated Photonics Platform. *Tzintzarov, G.N.*, +, *TNS Jan. 2020 260-267*
- Phase I Upgrade of the Readout System of the Vertex Detector at the LHCb Experiment. *Fernandez Prieto, A.*, +, *TNS April 2020 732-739*
- Single-Event Effects Characterization of LC-VCO PLLs in a 28-nm CMOS Technology. *Zhang, Z.*, +, *TNS Sept. 2020 2042-2050*
- Spin-Transfer Torque Magnetic Tunnel Junction for Single-Event Effects Mitigation in IC Design. *Coi, O.*, +, *TNS July 2020 1674-1681*
- Integrated circuit layout**
- A Chip-Level Single-Event Latchup (SEL) Estimation Methodology. *Neale, A.*, +, *TNS Jan. 2020 15-21*
- A Statistical Method for MCU Extraction Without the Physical-to-Logical Address Mapping. *Wang, X.*, +, *TNS July 2020 1443-1451*
- Design and Characterizations of the Radiation-Hardened XCR4C ASIC for X-Ray CCDs for Space Astronomical Applications. *Lu, B.*, +, *TNS June 2020 1175-1184*
- Integrated circuit modeling**
- A 3-D Simulation-Based Approach to Analyze Heavy Ions-Induced SET on Digital Circuits. *Sterpone, L.*, +, *TNS Sept. 2020 2034-2041*
- A Chip-Level Single-Event Latchup (SEL) Estimation Methodology. *Neale, A.*, +, *TNS Jan. 2020 15-21*
- Electronic-to-Photonic Single-Event Transient Propagation in a Segmented Mach-Zehnder Modulator in a Si/SiGe Integrated Photonics Platform. *Tzintzarov, G.N.*, +, *TNS Jan. 2020 260-267*
- Evaluation of a COTS 65-nm SRAM Under 15 MeV Protons and 14 MeV Neutrons at Low VDD. *Rezaei, M.*, +, *TNS Oct. 2020 2188-2195*
- Phosphorus Versus Arsenic: Role of the Photodiode Doping Element in CMOS Image Sensor Radiation-Induced Dark Current and Random Telegraph Signal. *Le Roch, A.*, +, *TNS July 2020 1241-1250*
- Sensitive-Volume Model of Single-Event Latchup for a 180-nm SRAM Test Structure. *Wang, P.*, +, *TNS Sept. 2020 2015-2020*
- Spin-Transfer Torque Magnetic Tunnel Junction for Single-Event Effects Mitigation in IC Design. *Coi, O.*, +, *TNS July 2020 1674-1681*
- Integrated circuit reliability**
- A Radiation-Tolerant, Multigigabit Serial Link Based on FPGAs. *Giordano, R.*, +, *TNS Aug. 2020 1852-1860*
- Assessment of On-Chip Current Sensor for Detection of Thermal-Neutron-Induced Transients. *Possamai Bastos, R.*, +, *TNS July 2020 1404-1411*
- Electronic-to-Photonic Single-Event Transient Propagation in a Segmented Mach-Zehnder Modulator in a Si/SiGe Integrated Photonics Platform. *Tzintzarov, G.N.*, +, *TNS Jan. 2020 260-267*
- Evaluating Soft Core RISC-V Processor in SRAM-Based FPGA Under Radiation Effects. *de Oliveira, A.B.*, +, *TNS July 2020 1503-1510*
- Improving Selective Fault Tolerance in GPU Register Files by Relaxing Application Accuracy. *Goncalves, M.M.*, +, *TNS July 2020 1573-1580*
- Improving the Reliability of TMR With Nontriplicated I/O on SRAM FPGAs. *Cannon, M.J.*, +, *TNS Jan. 2020 312-320*
- Spin-Transfer Torque Magnetic Tunnel Junction for Single-Event Effects Mitigation in IC Design. *Coi, O.*, +, *TNS July 2020 1674-1681*
- Understanding the Impact of Quantization, Accuracy, and Radiation on the Reliability of Convolutional Neural Networks on FPGAs. *Libano, F.*, +, *TNS July 2020 1478-1484*
- Integrated circuit testing**
- A 3-D Simulation-Based Approach to Analyze Heavy Ions-Induced SET on Digital Circuits. *Sterpone, L.*, +, *TNS Sept. 2020 2034-2041*
- A Chip-Level Single-Event Latchup (SEL) Estimation Methodology. *Neale, A.*, +, *TNS Jan. 2020 15-21*
- A Statistical Method for MCU Extraction Without the Physical-to-Logical Address Mapping. *Wang, X.*, +, *TNS July 2020 1443-1451*
- Evaluation of a COTS 65-nm SRAM Under 15 MeV Protons and 14 MeV Neutrons at Low VDD. *Rezaei, M.*, +, *TNS Oct. 2020 2188-2195*
- High-Energy Versus Thermal Neutron Contribution to Processor and Memory Error Rates. *Oliveira, D.*, +, *TNS June 2020 1161-1168*
- Sensitive-Volume Model of Single-Event Latchup for a 180-nm SRAM Test Structure. *Wang, P.*, +, *TNS Sept. 2020 2015-2020*
- Single Event Upsets Under 14-MeV Neutrons in a 28-nm SRAM-Based FPGA in Static Mode. *Fabero, J.C.*, +, *TNS July 2020 1461-1469*
- Statistical Method to Extract Radiation-Induced Multiple-Cell Upsets in SRAM-Based FPGAs. *Perez-Celis, A.*, +, *TNS Jan. 2020 50-56*
- Understanding the Key Parameter Dependences Influencing the Soft-Error Susceptibility of Standard Combinational Logic. *Pande, N.*, +, *TNS Jan. 2020 116-125*

Integrated circuits

Displacement Damage Effects Mitigation Approach for Heterojunction Bipolar Transistor Frequency Synthesizers. *Sotskov, D.I., +, TNS Nov. 2020 2396-2404*

Integrated optics

DCR Performance in Neutron-Irradiated CMOS SPADs From 150- to 180-nm Technologies. *Ratti, L., +, TNS July 2020 1293-1301*

Response of Waveguide-Integrated Germanium-on-Silicon p-i-n Photodiodes to Neutron Displacement Damage. *Goley, P.S., +, TNS Jan. 2020 296-304*

Integrated optoelectronics

Electronic-to-Photonic Single-Event Transient Propagation in a Segmented Mach-Zehnder Modulator in a Si/SiGe Integrated Photonics Platform. *Tzintzarov, G.N., +, TNS Jan. 2020 260-267*

Interface states

Evolution of Ionization-Induced Defects in GLPNP Bipolar Transistors at Different Temperatures. *Dong, L., +, TNS Sept. 2020 2003-2008*

Improved Model for Ionization-Induced Surface Recombination Current in p-n-p BJTs. *Li, L., +, TNS Aug. 2020 1826-1834*

Observation of Radiation-Induced Leakage Current Defects in MOS Oxides With Multifrequency Electrically Detected Magnetic Resonance and Near-Zero-Field Magnetoresistance. *Moxim, S.J., +, TNS Jan. 2020 228-233*

Radiation-Induced Variable Retention Time in Dynamic Random Access Memories. *Goiffon, V., +, TNS Jan. 2020 234-244*

Total-Ionizing-Dose Effects and Low-Frequency Noise in 16-nm InGaAs FinFETs With HfO₂/Al₂O₃ Dielectrics. *Bonaldo, S., +, TNS Jan. 2020 210-220*

Interpolation

Results on FPGA-Based High-Power Tube Amplifier Linearization at DESY. *Bellandi, A., +, TNS May 2020 762-767*

Ion accelerators

Design and Research of Magnetic Field Mapping System for SC200. *Chen, G., +, TNS Jan. 2020 369-373*

Longitudinal and Transverse Measurement to Evaluate the Beam Impedance on a Ceramic Ring-Loaded Thin-Wall Vacuum Chamber in BRing at HIAF. *Zhu, G., +, TNS July 2020 1702-1709*

Ion beam effects

Heavy-Ion Microbeam Studies of Single-Event Leakage Current Mechanism in SiC VD-MOSFETs. *Martinella, C., +, TNS July 2020 1381-1389*

Method for System-Level Testing of COTS Electronic Board Under High-Energy Heavy Ions. *de Bibikoff, A., +, TNS Oct. 2020 2179-2187*

New Approach for Pulsed-Laser Testing That Mimics Heavy-Ion Charge Deposition Profiles. *Hales, J.M., +, TNS Jan. 2020 81-90*

Reducing Soft Error Rate of SoCs Analog-to-Digital Interfaces With Design Diversity Redundancy. *Gonzalez, C.J., +, TNS March 2020 518-524*

Single Event Effect Testing With Ultrahigh Energy Heavy Ion Beams. *Kas-triotou, M., +, TNS Jan. 2020 63-70*

SOI Thin Microdosimeters for High LET Single-Event Upset Studies in Fe, O, Xe, and Cocktail Ion Beam Fields. *James, B., +, TNS Jan. 2020 146-153*

Unifying Concepts for Ion-Induced Leakage Current Degradation in Silicon Carbide Schottky Power Diodes. *Johnson, R.A., +, TNS Jan. 2020 135-139*

Ion implantation

Ionizing-Radiation Response and Low-Frequency Noise of 28-nm MOSFETs at Ultrahigh Doses. *Bonaldo, S., +, TNS July 2020 1302-1311*

Ionization

A Study on Ionization Damage Effects of Anode-Short MOS-Controlled Thyristor. *Li, L., +, TNS Sept. 2020 2062-2072*

Data-Retention-Voltage-Based Analysis of Systematic Variations in SRAM SEU Hardness: A Possible Solution to Synergistic Effects of TID. *Kobayashi, D., +, TNS Jan. 2020 328-335*

Ionization chambers

Gamma-Heating and Gamma Flux Measurements in the JSI TRIGA Reactor: Results and Prospects. *Gruel, A., +, TNS April 2020 559-567*

Gas Scintillation Imager With Capillary Plate. *Sugiyama, H., +, TNS June 2020 1035-1039*

Isolation technology

Proton and Gamma Radiation Effects on a Fully Depleted Pinned Photodiode CMOS Image Sensor. *Meng, X., +, TNS June 2020 1107-1113*

Total Ionizing Dose Effects in 30-V Split-Gate Trench VDMOS. *Wang, R., +, TNS Sept. 2020 2009-2014*

Total-Ionizing-Dose Effects and Low-Frequency Noise in 16-nm InGaAs FinFETs With HfO₂/Al₂O₃ Dielectrics. *Bonaldo, S., +, TNS Jan. 2020 210-220*

Isotopes

Design and Analytical Evaluation of a New Ion Collection Geometry for Improvement in Quantity and Quality of Product During Laser Isotope Separation. *Dikshit, B., +, TNS Dec. 2020 2465-2473*

J**Jitter**

Clock-Centric Serial Links for the Synchronization of Distributed Readout Systems. *Calvet, D., TNS Aug. 2020 1912-1919*

Scalable Self-Adaptive Synchronous Triggering System in Superconducting Quantum Computing. *Sun, L., +, TNS Sept. 2020 2148-2154*

Single-Event Effects Characterization of LC-VCO PLLs in a 28-nm CMOS Technology. *Zhang, Z., +, TNS Sept. 2020 2042-2050*

K**Kalman filters**

Proximity-Based Sensor Fusion of Depth Cameras and Isotropic Rad-Detectors. *Henderson, K., +, TNS May 2020 840-857*

Simultaneous Estimation of Neutron Flux and Reactivity in Nuclear Reactors. *Mishra, A.K., +, TNS Aug. 2020 1791-1802*

Klystrons

Results on FPGA-Based High-Power Tube Amplifier Linearization at DESY. *Bellandi, A., +, TNS May 2020 762-767*

Knowledge based systems

The Impact of Proton-Induced Single Events on Image Classification in a Neuromorphic Computing Architecture. *Brewer, R.M., +, TNS Jan. 2020 108-115*

L**Laminates**

Radiation Effects on FR4 Printed Circuit Boards. *Scheuer, K., +, TNS Aug. 2020 1846-1851*

Lanthanum compounds

Composite Scintillators Based on the Films and Crystals of (Lu,Gd,La)-Si₂O₇ Pyrosilicates. *Kurosawa, S., +, TNS June 2020 994-998*

Laser beam effects

Comparison of Sensitive Volumes Associated With Ion- and Laser-Induced Charge Collection in an Epitaxial Silicon Diode. *Ryder, K.L., +, TNS Jan. 2020 57-62*

New Approach for Pulsed-Laser Testing That Mimics Heavy-Ion Charge Deposition Profiles. *Hales, J.M., +, TNS Jan. 2020 81-90*

Nonstable Latchups in CMOS ICs Under Pulsed Laser Irradiation. *Shvetsov-Shilovskiy, I.I., +, TNS July 2020 1540-1546*

Polarization Dependence of Pulsed Laser-Induced SEEs in SOI FinFETs. *Ryder, L.D., +, TNS Jan. 2020 38-43*

Laser beams

Reflectance of Silicon Photomultipliers at Vacuum Ultraviolet Wavelengths. *Lv, P., +, TNS Dec. 2020 2501-2510*

Laser cavity resonators

Radiation Response of Distributed Feedback Bragg Gratings for Space Applications. *Morana, A., +, TNS Jan. 2020 284-288*

Laser materials processing

Radiation Response of Distributed Feedback Bragg Gratings for Space Applications. *Morana, A., +, TNS Jan. 2020 284-288*

LC circuits

Single-Event Effects Characterization of LC-VCO PLLs in a 28-nm CMOS Technology. *Zhang, Z., +, TNS Sept. 2020 2042-2050*

Leaching

Characterization of Uranium Ore Samples by HPGe Gamma-Ray Spectroscopy. *Marchais, T., +, TNS April 2020 654-661*

Lead compounds

CsPbBr₃ Thin Films on LYSO:Ce Substrates. *Tomanova, K.*, +, *TNS June 2020 933-938*

Stimulated Recovery of the Radiation Damage in Lead Tungstate Crystals. *Orsich, P.*, +, *TNS June 2020 952-955*

Leakage currents

Comparison of Zr, Bi, Ti, and Ga as Metal Contacts in Inorganic Perovskite CsPbBr₃ Gamma-Ray Detector. *Pan, L.*, +, *TNS Oct. 2020 2255-2262*

Experimental Study on Displacement Damage Effects of Anode-Short MOS-Controlled Thyristor. *Li, L.*, +, *TNS March 2020 508-517*

Heavy-Ion Microbeam Studies of Single-Event Leakage Current Mechanism in SiC VD-MOSFETs. *Martinella, C.*, +, *TNS July 2020 1381-1389*

High-Fluence Proton-Induced Degradation on AlGaIn/GaN High-Electron-Mobility Transistors. *Yue, S.*, +, *TNS July 2020 1339-1344*

Ion-Induced Energy Pulse Mechanism for Single-Event Burnout in High-Voltage SiC Power MOSFETs and Junction Barrier Schottky Diodes. *Ball, D.R.*, +, *TNS Jan. 2020 22-28*

Monitoring Deep Dielectric Charging Effects in Space. *Yu, X.*, +, *TNS April 2020 716-721*

Observation of Radiation-Induced Leakage Current Defects in MOS Oxides With Multifrequency Electrically Detected Magnetic Resonance and Near-Zero-Field Magnetoresistance. *Moxim, S.J.*, +, *TNS Jan. 2020 228-233*

Radiation-Hardened Sensor Interface Circuit for Monitoring Severe Accidents in Nuclear Power Plants. *Jeon, H.*, +, *TNS July 2020 1738-1745*

TID-Induced OFF-State Leakage Current in Partially Radiation-Hardened SOI LDMOS. *Shu, L.*, +, *TNS June 2020 1133-1138*

Total-Ionizing-Dose Effects and Low-Frequency Noise in 16-nm InGaAs FinFETs With HfO₂/Al₂O₃ Dielectrics. *Bonaldo, S.*, +, *TNS Jan. 2020 210-220*

Total-Ionizing-Dose Effects and Low-Frequency Noise in 30-nm Gate-Length Bulk and SOI FinFETs With SiO₂/HfO₂ Gate Dielectrics. *Gorchichko, M.*, +, *TNS Jan. 2020 245-252*

Total-Ionizing-Dose Effects on InGaAs FinFETs With Modified Gate-stack. *Zhao, S.E.*, +, *TNS Jan. 2020 253-259*

Total-Ionizing-Dose Effects, Border Traps, and 1/f Noise in Emerging MOS Technologies. *Fleetwood, D.M.*, +, *TNS July 2020 1216-1240*

Unifying Concepts for Ion-Induced Leakage Current Degradation in Silicon Carbide Schottky Power Diodes. *Johnson, R.A.*, +, *TNS Jan. 2020 135-139*

Length measurement

Effect of Drift Length on Shifts in 400-V SOI LDMOS Breakdown Voltage Due to TID. *Shu, L.*, +, *TNS Nov. 2020 2392-2395*

Lenses

New Approach for Pulsed-Laser Testing That Mimics Heavy-Ion Charge Deposition Profiles. *Hales, J.M.*, +, *TNS Jan. 2020 81-90*

Theoretical Simulation of X-Ray Transmission Through a Polycapillary X-Ray Lens With a Variable Capillary Radius. *Wang, X.*, +, *TNS May 2020 791-796*

Lepton magnetic moment

Design and Performance of Data Acquisition and Control System for the Muon g-2 Laser Calibration. *Mastroianni, S.*, +, *TNS May 2020 832-839*

Life testing

A Chip-Level Single-Event Latchup (SEL) Estimation Methodology. *Neale, A.*, +, *TNS Jan. 2020 15-21*

High-Energy Versus Thermal Neutron Contribution to Processor and Memory Error Rates. *Oliveira, D.*, +, *TNS June 2020 1161-1168*

Light emitting diodes

Comparison of X-Ray and Proton Irradiation Effects on the Characteristics of InGaIn/GaN Multiple Quantum Wells Light-Emitting Diodes. *Wang, L.*, +, *TNS July 2020 1345-1350*

Mechanism Analysis of Proton Irradiation-Induced Increase of 3-dB Bandwidth of GaN-Based Microlight-Emitting Diodes for Space Light Communication. *Wang, L.*, +, *TNS July 2020 1360-1364*

Stimulated Recovery of the Radiation Damage in Lead Tungstate Crystals. *Orsich, P.*, +, *TNS June 2020 952-955*

Light polarization

Polarization Dependence of Pulsed Laser-Induced SEEs in SOI FinFETs. *Ryder, L.D.*, +, *TNS Jan. 2020 38-43*

Light propagation

Onset of Fogging and Degradation in Polyvinyl Toluene-Based Scintillators. *Rose, P.B.*, +, *TNS July 2020 1765-1771*

Light sources

Comparison of Back-Thinned Detector Ultraviolet Quantum Efficiency for Two Commercially Available Passivation Treatments. *Heymes, J.*, +, *TNS Aug. 2020 1962-1967*

Light transmission

Onset of Fogging and Degradation in Polyvinyl Toluene-Based Scintillators. *Rose, P.B.*, +, *TNS July 2020 1765-1771*

Light water reactors

In Situ Gas Monitoring by Fiber-Coupled Raman Spectrometry for H₂-Risk Management in Nuclear Containment During a Severe Nuclear Accident. *Magne, S.*, +, *TNS April 2020 617-624*

Nuclear Data Covariance Analysis in Radiation-Transport Simulations Utilizing SCALE Sampler and the IRDFF Nuclear Data Library. *Quartemont, N.J.*, +, *TNS March 2020 482-491*

Linear accelerators

A 150-kW Pulse Solid-State Amplifier for Radio Frequency Quadrupole Application. *Jain, A.*, +, *TNS Nov. 2020 2303-2310*

Continuous Wave Operation of Superconducting Accelerating Cavities With High Loaded Quality Factor. *Cichalewski, W.*, +, *TNS Sept. 2020 2119-2127*

Design of Electromagnetic Bandgap Cavities for High-Gradient On-Axis Coupled-Cavity Linear Accelerators. *Laneve, D.*, +, *TNS May 2020 768-776*

On the Combined Effect of Silicon Oxide Thickness and Boron Implantation Under the Gate in MOSFET Dosimeters. *Biasi, G.*, +, *TNS March 2020 534-540*

Simulation and Measurements of Collimator Effects in Proton and Neutron Radiation Testing for Single-Event Effects. *Belanger-Champagne, C.*, +, *TNS Jan. 2020 161-168*

Ultralow Power Ionizing Dose Sensor Based on Complementary Fully Depleted MOS Transistors for Radiotherapy Application. *Alcalde Bessia, F.*, +, *TNS Oct. 2020 2217-2223*

Liouville equation

Modeling of Near Zero-Field Magnetoresistance and Electrically Detected Magnetic Resonance in Irradiated Si/SiO₂ MOSFETs. *Harmon, N.J.*, +, *TNS July 2020 1669-1673*

Liquid phase epitaxial growth

Composite Scintillators Based on the Films and Crystals of (Lu,Gd,La)₂Si₂O₇ Pyrosilicates. *Kurosawa, S.*, +, *TNS June 2020 994-998*

Liquid scintillation detectors

Optimization of the Charge Comparison Method for Multiradiation Field Using Various Measurement Systems. *Lynde, C.*, +, *TNS April 2020 679-687*

Study on Reactor Neutrino Directionality Search Utilizing Vertex Information Reconstructed by PMT Operating State in a Liquid Scintillator Detector. *Shin, C.D.*, +, *TNS Sept. 2020 1996-2002*

Time Resolution Measurements of EJ-232Q With Single- and Dual-Sided Readouts. *Wen, X.*, +, *TNS Sept. 2020 2081-2088*

Lithium compounds

Characterization of Silver-Doped LiF Crystal Grown by Czochralski Technique for Dark Matter Search Application. *Pandey, I.R.*, +, *TNS June 2020 915-921*

Thermal Characterization of Tl₂LiYCl₆:Ce (TLYC). *Watts, M.M.*, +, *TNS March 2020 525-533*

Lithography

Fabrication and First Characterization of Silicon-Based Full 3-D Microdosimeters. *Kok, A.*, +, *TNS Dec. 2020 2490-2500*

Local area networks

A DAQ Upgrade Solution for Belle II Experiment. *Liu, Z.*, +, *TNS Aug. 2020 1904-1911*

Design and Performance of Data Acquisition and Control System for the Muon g-2 Laser Calibration. *Mastroianni, S.*, +, *TNS May 2020 832-839*

Reliability Analysis of Ethernet-Based Solutions for Data Transmission in the CERN Radiation Environment. *Gnemmi, G.*, +, *TNS July 2020 1614-1622*

Logic design

Achieving Picosecond-Level Phase Stability in Timing Distribution Systems With Xilinx Ultrascale Transceivers. *Mendes, E.*, +, *TNS March 2020 473-481*

Multiple Layout-Hardening Comparison of SEU-Mitigated Filp-Flops in 22-nm UTBB FD-SOI Technology. *Cai, C.*, +, *TNS Jan. 2020 374-381*

SE Response of Guard-Gate FF in 16- and 7-nm Bulk FinFET Technologies. *Cao, J.*, +, *TNS July 2020 1436-1442*

Logic gates

A Heavy-Ion Detector Based on 3-D NAND Flash Memories. *Bagatin, M.*, +, *TNS Jan. 2020 154-160*

A Special Total-Ionizing-Dose-Induced Short Channel Effect in Thin-Film PDSOI Technology: Phenomena, Analyses, and Models. *Bi, D.*, +, *TNS Nov. 2020 2337-2344*

Understanding the Key Parameter Dependences Influencing the Soft-Error Susceptibility of Standard Combinational Logic. *Pande, N.*, +, *TNS Jan. 2020 116-125*

Logic testing

Achieving Picosecond-Level Phase Stability in Timing Distribution Systems With Xilinx Ultrascale Transceivers. *Mendes, E.*, +, *TNS March 2020 473-481*

High-Energy Versus Thermal Neutron Contribution to Processor and Memory Error Rates. *Oliveira, D.*, +, *TNS June 2020 1161-1168*

Low noise amplifiers

Tradeoffs Between RF Performance and SET Robustness in Low-Noise Amplifiers in a Complementary SiGe BiCMOS Platform. *Idefonso, A.*, +, *TNS July 2020 1521-1529*

Low-power electronics

A 4-MHz, 256-Channel Readout ASIC for Column-Parallel CCDs With 78.7-dB Dynamic Range. *Grace, C.R.*, +, *TNS May 2020 823-831*

Assessment of On-Chip Current Sensor for Detection of Thermal-Neutron-Induced Transients. *Possamai Bastos, R.*, +, *TNS July 2020 1404-1411*

Luminescence

Luminescence and Scintillation Properties of Mg²⁺-Codoped Lu_{0.6}Gd_{2.4}Al₂Ga₃O₁₂:Ce Single Crystal. *Chewpraditkul, W.*, +, *TNS June 2020 904-909*

Scintillation Characteristics of Mg²⁺-Codoped Y_{0.8}Gd_{2.2}(Al_{5-x}Ga_x)O₁₂:Ce Single Crystals. *Chewpraditkul, W.*, +, *TNS June 2020 910-914*

Scintillation Properties of Tetrafluoroaluminate Crystal. *Daniel, D.J.*, +, *TNS June 2020 898-903*

Lumped parameter networks

Design Process for Synchrotron RF Cavities Loaded With Magnetic Ring Cores. *Klingbeil, H.*, +, *TNS Jan. 2020 361-368*

Lutetium compounds

Advances in High-Resolution Ultrafast LuI₃:Ce Scintillators for Fast Timing Applications. *Marshall, M.S.J.*, +, *TNS June 2020 969-973*

Band Gap Variation and Trap Distribution in Transparent Garnet Scintillator Ceramics. *Wieczorek, H.*, +, *TNS Aug. 2020 1934-1945*

Composite Scintillators Based on the Films and Crystals of (Lu,Gd,La)-₂Si₂O₇ Pyrosilicates. *Kurosawa, S.*, +, *TNS June 2020 994-998*

Influence of Annealing Temperature on the Performance of Lu₂O₃:Eu³⁺ Nanowire Arrays Synthesized by Sol-Gel Method Using AAO Template. *Hu, Y.*, +, *TNS Aug. 2020 1899-1903*

Luminescence and Scintillation Properties of Mg²⁺-Codoped Lu_{0.6}Gd_{2.4}Al₂Ga₃O₁₂:Ce Single Crystal. *Chewpraditkul, W.*, +, *TNS June 2020 904-909*

Luminescent Nanocomposites for Biomedical Applications. *Popovich, K.*, +, *TNS June 2020 962-968*

Scintillation Characteristics of Mg²⁺-Codoped Y_{0.8}Gd_{2.2}(Al_{5-x}Ga_x)O₁₂:Ce Single Crystals. *Chewpraditkul, W.*, +, *TNS June 2020 910-914*

Scintillation Properties of Tetrafluoroaluminate Crystal. *Daniel, D.J.*, +, *TNS June 2020 898-903*

M**Magnesium**

Light Yield and Timing Characteristics of Lu_{0.8}Gd_{2.2}(Al_{5-x}Ga_x)O₁₂:Ce,Mg Single Crystals. *Sakthong, O.*, +, *TNS Oct. 2020 2295-2299*

Magnetic field measurement

Design and Research of Magnetic Field Mapping System for SC200. *Chen, G.*, +, *TNS Jan. 2020 369-373*

Magnetic fields

Design and Research of Magnetic Field Mapping System for SC200. *Chen, G.*, +, *TNS Jan. 2020 369-373*

Magnetic resonance

Modeling of Near Zero-Field Magnetoresistance and Electrically Detected Magnetic Resonance in Irradiated Si/SiO₂ MOSFETs. *Harmon, N.J.*, +, *TNS July 2020 1669-1673*

Observation of Radiation-Induced Leakage Current Defects in MOS Oxides With Multifrequency Electrically Detected Magnetic Resonance and Near-Zero-Field Magnetoresistance. *Moxim, S.J.*, +, *TNS Jan. 2020 228-233*

Magnetic storms

Charging Monitor Aboard the Geostationary Satellite GK2A at 128.2° E Longitude. *Woo, J.*, +, *TNS April 2020 740-745*

Magnetic tunneling

Spin-Transfer Torque Magnetic Tunnel Junction for Single-Event Effects Mitigation in IC Design. *Coi, O.*, +, *TNS July 2020 1674-1681*

Magnetoelectronics

Spin-Transfer Torque Magnetic Tunnel Junction for Single-Event Effects Mitigation in IC Design. *Coi, O.*, +, *TNS July 2020 1674-1681*

Magnetoresistance

Modeling of Near Zero-Field Magnetoresistance and Electrically Detected Magnetic Resonance in Irradiated Si/SiO₂ MOSFETs. *Harmon, N.J.*, +, *TNS July 2020 1669-1673*

Observation of Radiation-Induced Leakage Current Defects in MOS Oxides With Multifrequency Electrically Detected Magnetic Resonance and Near-Zero-Field Magnetoresistance. *Moxim, S.J.*, +, *TNS Jan. 2020 228-233*

Mammography

Effects of High-Dose X-Ray Irradiation on the Hole Lifetime in Vacuum-Deposited Stabilized a-Se Photoconductive Films: Implications to the Quality Control of a-Se Used in X-Ray Detectors. *Simonson, B.*, +, *TNS Nov. 2020 2445-2453*

Materials preparation

Role of Chemical Substitution in the Photoluminescence Properties of Cerium Samarium Tungstates Ce_(2-x)Sm_x(WO₄)₃ (0 ≤ x ≤ 0.3). *Derraji, K.*, +, *TNS April 2020 568-574*

Materials testing

Qualification of a New Differential Calorimeter Configuration Dedicated to Nuclear Heating Rates up to 20 W.g⁻¹. *Volte, A.*, +, *TNS Nov. 2020 2405-2414*

Mathematical model

Simulation of High-Altitude Nuclear Electromagnetic Pulse Using a Modified Model of Scattered Gamma. *Li, Y.*, +, *TNS Dec. 2020 2474-2480*

Matrix decomposition

Modeling Aerial Gamma-Ray Backgrounds Using Non-negative Matrix Factorization. *Bandstra, M.S.*, +, *TNS May 2020 777-790*

Matrix multiplication

Impact of Tensor Cores and Mixed Precision on the Reliability of Matrix Multiplication in GPUs. *Basso, P.M.*, +, *TNS July 2020 1560-1565*

Maximum likelihood estimation

Collimator-Less Passive Gamma Scanning for Radioactive Waste Drums. *Vax, E.*, +, *TNS April 2020 544-551*

Gamma-Ray Source Detection Under Occlusions and Position Errors in Cluttered Urban Scenes. *Miller, K.*, +, *TNS June 2020 1185-1194*

Reconstructing the Position and Intensity of Multiple Gamma-Ray Point Sources With a Sparse Parametric Algorithm. *Vavrek, J.R.*, +, *TNS Nov. 2020 2421-2430*

Maxwell equations

Quantitative Study of Pulsed X-Ray-Induced Electromagnetic Response in Coaxial Cables. *Ribiere, M.*, +, *TNS July 2020 1722-1731*

Measurement by laser beam

Reflectance of Silicon Photomultipliers at Vacuum Ultraviolet Wavelengths. *Lv, P.*, +, *TNS Dec. 2020 2501-2510*

Measurement errors

Performances of Radiation-Hardened Single-Ended Raman Distributed Temperature Sensors Using Commercially Available Fibers. *Morana, A.*, +, *TNS Jan. 2020 305-311*

Medical image processing

Compton Background Elimination for in Vivo X-Ray Fluorescence Imaging of Gold Nanoparticles Using Convolutional Neural Network. *Jung, S.*, +, *TNS Nov. 2020 2311-2320*

ROI-Wise Material Decomposition in Spectral Photon-Counting CT. *Xie, B.*, +, *TNS June 2020 1066-1075*

Selective Isotope CT Imaging Based on Nuclear Resonance Fluorescence Transmission Method. *Ali, K.*, +, *TNS Aug. 2020 1976-1984*

Meetings

Special NSREC 2019 issue of the IEEE Transactions on Nuclear Science Editor Comments. *Fleetwood, D.*, +, *TNS Jan. 2020 7*

Meson-nucleon interactions

GEANT4 Model for Heavy Baryon/Meson–Nucleon Cross Sections. *Grichine, V.M.*, *TNS Sept. 2020 1993-1995*

Mesoporous materials

Luminescent Nanocomposites for Biomedical Applications. *Popovich, K.*, +, *TNS June 2020 962-968*

Metal-semiconductor-metal structures

Effect of the Electric Field Strength on the Energy Resolution of Cr/CdTe/Pt Detectors. *Sklyarchuk, V.*, +, *TNS Nov. 2020 2439-2444*

Microchannel plates

A Photomultiplier With an AlGaIn Photocathode and Microchannel Plates for BaF₂ Scintillator Detectors in Particle Physics. *Atanov, N.*, +, *TNS July 2020 1760-1764*

Microcontrollers

Empirical Mathematical Model of Microprocessor Sensitivity and Early Prediction to Proton and Neutron Radiation-Induced Soft Errors. *Serrano-Cases, A.*, +, *TNS July 2020 1511-1520*

Thermal Neutron-Induced Single-Event Upsets in Microcontrollers Containing Boron-10. *Auden, E.C.*, +, *TNS Jan. 2020 29-37*

Microelectronics

Effect of Drift Length on Shifts in 400-V SOI LDMOS Breakdown Voltage Due to TID. *Shu, L.*, +, *TNS Nov. 2020 2392-2395*

Microorganisms

Luminescent Nanocomposites for Biomedical Applications. *Popovich, K.*, +, *TNS June 2020 962-968*

Microprocessor chips

A Low-Overhead FFT Design With Higher SEU Resilience Implemented in FPGA. *Wang, H.*, +, *TNS May 2020 805-810*

Applying Compiler-Automated Software Fault Tolerance to Multiple Processor Platforms. *James, B.*, +, *TNS Jan. 2020 321-327*

Error Detection and Mitigation of Data-Intensive Microprocessor Applications Using SIMD and Trace Monitoring. *Pena-Fernandez, M.*, +, *TNS July 2020 1452-1460*

The Use of Microprocessor Trace Infrastructures for Radiation-Induced Fault Diagnosis. *Pena-Fernandez, M.*, +, *TNS Jan. 2020 126-134*

Microwave devices

Phase Drift Compensating RF Link for Femtosecond Synchronization of E-XFEL. *Sikora, D.*, +, *TNS Sept. 2020 2136-2142*

Microwave field effect transistors

Tradeoffs Between RF Performance and SET Robustness in Low-Noise Amplifiers in a Complementary SiGe BiCMOS Platform. *Ildefonso, A.*, +, *TNS July 2020 1521-1529*

Microwave photonics

Phase Drift Compensating RF Link for Femtosecond Synchronization of E-XFEL. *Sikora, D.*, +, *TNS Sept. 2020 2136-2142*

Minerals

Characterization of Uranium Ore Samples by HPGc Gamma-Ray Spectroscopy. *Marchais, T.*, +, *TNS April 2020 654-661*

MIS structures

Observation of Radiation-Induced Leakage Current Defects in MOS Oxides With Multifrequency Electrically Detected Magnetic Resonance and Near-Zero-Field Magnetoresistance. *Moxim, S.J.*, +, *TNS Jan. 2020 228-233*

Mixed analog digital integrated circuits

Cryogenic Bandgap Reference Circuit With Compact Model Parameter Extraction of MOSFETs and BJTs for HPGc Detectors. *Liu, F.*, +, *TNS Oct. 2020 2209-2216*

Mobile computing

Gamma-Ray Source Detection Under Occlusions and Position Errors in Cluttered Urban Scenes. *Miller, K.*, +, *TNS June 2020 1185-1194*

MOCVD

Optical Properties of InGaN/GaN Multiple Quantum Well Structures Grown on GaN and Sapphire Substrates. *Jary, V.*, +, *TNS June 2020 974-977*

Molecular beam epitaxial growth

Modeling Photocathode Performance Using MedeA-VASP Simulation Software. *Williams, J.O.D.*, +, *TNS Sept. 2020 1987-1992*

Molecular biophysics

Luminescent Nanocomposites for Biomedical Applications. *Popovich, K.*, +, *TNS June 2020 962-968*

Molecular dynamics method

A Survey of the Analytical Methods of Proton-NIEL Calculations in Silicon and Germanium. *Akkerman, A.*, +, *TNS Aug. 2020 1813-1825*

Simulation of Single Particle Displacement Damage in Si_{1-x}Ge_x Alloys—Interaction of Primary Particles With the Material and Generation of the Damage Structure. *Jarrin, T.*, +, *TNS July 2020 1273-1283*

Monitoring

Corrections to “Irradiation Tests of Optical Fibers and Cables Devoted to Corium Monitoring in Case of a Severe Accident in a Nuclear Power Plant”. *Cheyamol, G.*, +, *TNS June 2020 1195*

Failure Analysis of Galaxy S7 Edge Smartphone Using Neutron Radiation. *Bak, G.*, +, *TNS Nov. 2020 2370-2381*

Monte Carlo methods

A Heavy-Ion Detector Based on 3-D NAND Flash Memories. *Bagatin, M.*, +, *TNS Jan. 2020 154-160*

A mm³ Fiber-Coupled Scintillator for In-Core Thermal Neutron Detection in CROCUS. *Vitulo, F.*, +, *TNS April 2020 625-635*

A Solid-State Microdosimeter for Dose and Radiation Quality Monitoring for Astronauts in Space. *Peracchi, S.*, +, *TNS Jan. 2020 169-174*

Automatic and Real-Time Identification of Radionuclides in Gamma-Ray Spectra: A New Method Based on Convolutional Neural Network Trained With Synthetic Data Set. *Daniel, G.*, +, *TNS April 2020 644-653*

Characterizing High-Energy Ion Beams With PIPS Detectors. *Bagatin, M.*, +, *TNS July 2020 1421-1427*

Design-of-Experiments and Monte-Carlo Methods in Upset Rate-Calculations. *Hansen, D.L.*, *TNS Jan. 2020 336-344*

Estimation of Residual Radioactivity and Radiation Damage in SiC After Neutron Irradiation. *Lee, K.*, +, *TNS July 2020 1374-1380*

Evolutions in Photoelectric Cross Section Calculations and Their Validation. *Basaglia, T.*, +, *TNS March 2020 492-501*

Gamma-Heating and Gamma Flux Measurements in the JSI TRIGA Reactor: Results and Prospects. *Gruel, A.*, +, *TNS April 2020 559-567*

Generation of Synthetic Data for a Radiation Detection Algorithm Competition. *Nicholson, A.D.*, +, *TNS Aug. 2020 1968-1975*

Heavy Ion Nuclear Reaction Impact on SEE Testing: From Standard to Ultra-high Energies. *Wyrwoll, V.*, +, *TNS July 2020 1590-1598*

Inherent Uncertainty in the Determination of Multiple Event Cross Sections in Radiation Tests. *Franco, F.J.*, +, *TNS July 2020 1547-1554*

Intercomparison of Ionizing Doses From Space Shielding Analyses Using MCNP, Geant4, FASTRAD, and NOVICE. *Jun, B.*, +, *TNS July 2020 1629-1636*

Modeling Aerial Gamma-Ray Backgrounds Using Non-negative Matrix Factorization. *Bandstra, M.S.*, +, *TNS May 2020 777-790*

Monte Carlo Calculations of the Detection Efficiency of Composite Scintillator Arrays for Fast and Moderated Neutrons, and for Gamma-Ray Spectroscopy. *Devenzo, S.E.*, +, *TNS June 2020 888-893*

Neutron Detection Module Based on Li-Glass Scintillator and Array of SiPMs. *Wengrowicz, U.*, +, *TNS April 2020 599-602*

Nuclear Heating Measurements by Gamma and Neutron Thermometers. *Van Nieuwenhove, R.*, +, *TNS Sept. 2020 2073-2080*

Pile-Up Correction in Spectroscopic Signals Using Regularized Sparse Reconstruction. *Kafae, M.*, +, *TNS May 2020 858-862*

Progress on the Electromagnetic Calorimeter Trigger Simulation at the Belle II Experiment. *Lee, I.S.*, +, *TNS Sept. 2020 2143-2147*

Quantitative Study of Pulsed X-Ray-Induced Electromagnetic Response in Coaxial Cables. *Ribiere, M.*, +, *TNS July 2020 1722-1731*

- Response of the BGO Calorimeter to Cosmic-Ray Nuclei in the DAMPE Experiment on Orbit. *Dai, H.T.*, +, *TNS June 2020 956-961*
- Sensitive-Volume Model of Single-Event Latchup for a 180-nm SRAM Test Structure. *Wang, P.*, +, *TNS Sept. 2020 2015-2020*
- Simulating Charge Deposition by Cosmic Rays Inside Astronomical Imaging Detectors. *Lucsanyi, D.*, +, *TNS July 2020 1623-1628*
- Simulation and Measurements of Collimator Effects in Proton and Neutron Radiation Testing for Single-Event Effects. *Belanger-Champagne, C.*, +, *TNS Jan. 2020 161-168*
- Simulation of Single Particle Displacement Damage in Si_{1-x}Ge_x Alloys—Interaction of Primary Particles With the Material and Generation of the Damage Structure. *Jarrin, T.*, +, *TNS July 2020 1273-1283*
- Single-Event Upset Tolerance Study of a Low-Voltage 13T Radiation-Hardened SRAM Bitcell. *Haran, A.*, +, *TNS Aug. 2020 1803-1812*
- Study of the Deposited Energy Spectra in Silicon by High-Energy Neutron and Mixed Fields. *Cazzaniga, C.*, +, *TNS Jan. 2020 175-180*
- The Quenching Effect of BGO Crystals on Relativistic Heavy Ions in the DAMPE Experiment. *Wei, Y.*, +, *TNS June 2020 939-945*
- Thermal Neutron-Induced Single-Event Upsets in Microcontrollers Containing Boron-10. *Auden, E.C.*, +, *TNS Jan. 2020 29-37*
- MOS-controlled thyristors**
- A Study on Ionization Damage Effects of Anode-Short MOS-Controlled Thyristor. *Li, L.*, +, *TNS Sept. 2020 2062-2072*
- Experimental Study on Displacement Damage Effects of Anode-Short MOS-Controlled Thyristor. *Li, L.*, +, *TNS March 2020 508-517*
- MOSFET**
- A Special Total-Ionizing-Dose-Induced Short Channel Effect in Thin-Film PDSOI Technology: Phenomena, Analyses, and Models. *Bi, D.*, +, *TNS Nov. 2020 2337-2344*
- Angular Sensitivity of Neutron-Induced Single-Event Upsets in 12-nm FinFET SRAMs With Comparison to 20-nm Planar SRAMs. *Kato, T.*, +, *TNS July 2020 1485-1493*
- Cryogenic Bandgap Reference Circuit With Compact Model Parameter Extraction of MOSFETs and BJTs for HPGe Detectors. *Liu, F.*, +, *TNS Oct. 2020 2209-2216*
- DFF Layout Variations in CMOS SOI—Analysis of Hardening by Design Options. *Black, J.D.*, +, *TNS June 2020 1125-1132*
- Dose Measurements and Simulations of the RADFETs Response Onboard the Alphasat CTTB Experiments. *Sampaio, J.M.*, +, *TNS Sept. 2020 2028-2033*
- Ionizing-Radiation Response and Low-Frequency Noise of 28-nm MOSFETs at Ultrahigh Doses. *Bonaldo, S.*, +, *TNS July 2020 1302-1311*
- Modeling of Near Zero-Field Magnetoresistance and Electrically Detected Magnetic Resonance in Irradiated Si/SiO₂ MOSFETs. *Harmon, N.J.*, +, *TNS July 2020 1669-1673*
- On the Combined Effect of Silicon Oxide Thickness and Boron Implantation Under the Gate in MOSFET Dosimeters. *Biasi, G.*, +, *TNS March 2020 534-540*
- Polarization Dependence of Pulsed Laser-Induced SEEs in SOI FinFETs. *Ryder, L.D.*, +, *TNS Jan. 2020 38-43*
- SE Response of Guard-Gate FF in 16- and 7-nm Bulk FinFET Technologies. *Cao, J.*, +, *TNS July 2020 1436-1442*
- TID Response of Bulk Si PMOS FinFETs: Bias, Fin Width, and Orientation Dependence. *Ren, Z.*, +, *TNS July 2020 1320-1325*
- TID-Induced Breakdown Voltage Degradation in Uniform and Linear Variable Doping SOI p-LDMOSFETs. *Shu, L.*, +, *TNS July 2020 1390-1394*
- TID-Induced OFF-State Leakage Current in Partially Radiation-Hardened SOI LDMOS. *Shu, L.*, +, *TNS June 2020 1133-1138*
- Total Ionizing Dose Effects in 30-V Split-Gate Trench VDMOS. *Wang, R.*, +, *TNS Sept. 2020 2009-2014*
- Total-Ionizing-Dose Effects and Low-Frequency Noise in 16-nm InGaAs FinFETs With HfO₂/Al₂O₃ Dielectrics. *Bonaldo, S.*, +, *TNS Jan. 2020 210-220*
- Total-Ionizing-Dose Effects and Low-Frequency Noise in 30-nm Gate-Length Bulk and SOI FinFETs With SiO₂/HfO₂ Gate Dielectrics. *Gorchichko, M.*, +, *TNS Jan. 2020 245-252*
- Total-Ionizing-Dose Effects in InGaAs MOSFETs With High-*k* Gate Dielectrics and InP Substrates. *Bonaldo, S.*, +, *TNS July 2020 1312-1319*
- Total-Ionizing-Dose Effects on InGaAs FinFETs With Modified Gate-stack. *Zhao, S.E.*, +, *TNS Jan. 2020 253-259*
- Total-Ionizing-Dose Effects, Border Traps, and 1/*f* Noise in Emerging MOS Technologies. *Fleetwood, D.M.*, *TNS July 2020 1216-1240*
- Ultralow Power Ionizing Dose Sensor Based on Complementary Fully Depleted MOS Transistors for Radiotherapy Application. *Alcalde Bessia, F.*, +, *TNS Oct. 2020 2217-2223*
- Understanding the Key Parameter Dependences Influencing the Soft-Error Susceptibility of Standard Combinational Logic. *Pande, N.*, +, *TNS Jan. 2020 116-125*
- MOSFET circuits**
- Temperature-Compensated MOS Dosimeter Fully Integrated in a High-Voltage 0.35 μm CMOS Process. *Carbonetto, S.*, +, *TNS June 2020 1118-1124*
- Muon capture**
- Irradiation Test of 65-nm Bulk SRAMs With DC Muon Beam at RCNP-MUSIC Facility. *Mahara, T.*, +, *TNS July 2020 1555-1559*
- Muon detection**
- Irradiation Test of 65-nm Bulk SRAMs With DC Muon Beam at RCNP-MUSIC Facility. *Mahara, T.*, +, *TNS July 2020 1555-1559*
- Precision Timing in the CMS MTD Barrel Timing Layer With Crystal Bars and SiPMs. *Santanastasio, F.*, *TNS Sept. 2020 2105-2110*
- Muons**
- Design and Performance of Data Acquisition and Control System for the Muon g-2 Laser Calibration. *Mastroianni, S.*, +, *TNS May 2020 832-839*
- Impact of the Angle of Incidence on Negative Muon-Induced SEU Cross Sections of 65-nm Bulk and FDSOI SRAMs. *Liao, W.*, +, *TNS July 2020 1566-1572*
- SiT: A Strip-Sensor Readout Chip With Subnanosecond Time Walk for the J-PARC Muon g – 2/EDM Experiment. *Kishishita, T.*, +, *TNS Sept. 2020 2089-2095*
- N**
- NAND circuits**
- A Heavy-Ion Detector Based on 3-D NAND Flash Memories. *Bagatin, M.*, +, *TNS Jan. 2020 154-160*
- Layer-Dependent Bit Error Variation in 3-D NAND Flash Under Ionizing Radiation. *Kumari, P.*, +, *TNS Sept. 2020 2021-2027*
- Nanocomposites**
- Colloidal Quantum Dot-Doped Optical Fibers for Scintillation Dosimetry. *Whittaker, C.*, +, *TNS June 2020 1040-1044*
- Luminescent Nanocomposites for Biomedical Applications. *Popovich, K.*, +, *TNS June 2020 962-968*
- Nanofabrication**
- CsPbBr₃ Thin Films on LYSO:Ce Substrates. *Tomanova, K.*, +, *TNS June 2020 933-938*
- Influence of Annealing Temperature on the Performance of Lu₂O₃:Eu³⁺ Nanowire Arrays Synthesized by Sol–Gel Method Using AAO Template. *Hu, Y.*, +, *TNS Aug. 2020 1899-1903*
- Luminescent Nanocomposites for Biomedical Applications. *Popovich, K.*, +, *TNS June 2020 962-968*
- Nanomedicine**
- Compton Background Elimination in Vivo X-Ray Fluorescence Imaging of Gold Nanoparticles Using Convolutional Neural Network. *Jung, S.*, +, *TNS Nov. 2020 2311-2320*
- Luminescent Nanocomposites for Biomedical Applications. *Popovich, K.*, +, *TNS June 2020 962-968*
- Nanoparticles**
- Compton Background Elimination in Vivo X-Ray Fluorescence Imaging of Gold Nanoparticles Using Convolutional Neural Network. *Jung, S.*, +, *TNS Nov. 2020 2311-2320*
- Hybrid Multipixel Array X-Ray Detectors for Real-Time Direct Detection of Hard X-Rays. *Thirianne, H.M.*, +, *TNS Oct. 2020 2238-2245*
- Luminescent Nanocomposites for Biomedical Applications. *Popovich, K.*, +, *TNS June 2020 962-968*

X-Ray Detection Capabilities of Plastic Scintillators Incorporated With ZrO₂ Nanoparticles. *Toda, A.*, +, *TNS June 2020 983-987*

Nanostructured materials

CsPbBr₃ Thin Films on LYSO:Ce Substrates. *Tomanova, K.*, +, *TNS June 2020 933-938*

Nanotechnology

A 3-D Simulation-Based Approach to Analyze Heavy Ions-Induced SET on Digital Circuits. *Sterpone, L.*, +, *TNS Sept. 2020 2034-2041*

Nanowires

Influence of Annealing Temperature on the Performance of Lu₂O₃:Eu³⁺ Nanowire Arrays Synthesized by Sol-Gel Method Using AAO Template. *Hu, Y.*, +, *TNS Aug. 2020 1899-1903*

TID Response of Nanowire Field-Effect Transistors: Impact of the Back-Gate Bias. *Riffaud, J.*, +, *TNS Oct. 2020 2172-2178*

Network routing

Improving the Reliability of TMR With Nontriplicated I/O on SRAM FPGAs. *Cannon, M.J.*, +, *TNS Jan. 2020 312-320*

Network synthesis

Radiation Hardened by Design Subsampling Phase-Locked Loop Techniques in PD-SOI. *Richards, E.W.*, +, *TNS June 2020 1144-1151*

Neural network architecture

The Impact of Proton-Induced Single Events on Image Classification in a Neuromorphic Computing Architecture. *Brewer, R.M.*, +, *TNS Jan. 2020 108-115*

Neural networks

Performance Study of the First 2-D Prototype of Vertically Integrated Pattern Recognition Associative Memory. *Deptuch, G.*, +, *TNS Sept. 2020 2111-2118*

Neutrino detection

Development of Tin-Based Single Crystal Scintillator for Double-Beta Decay Experiments. *Aryal, P.*, +, *TNS June 2020 922-926*

Study on Reactor Neutrino Directionality Search Utilizing Vertex Information Reconstructed by PMT Operating State in a Liquid Scintillator Detector. *Shin, C.D.*, +, *TNS Sept. 2020 1996-2002*

Neutron beams

⁶LiF:ZnS(Ag) Neutron Detector Performance Optimized Using Waveform Recordings and ROC Curves. *Pritchard, K.*, +, *TNS Jan. 2020 414-421*

Simulation and Measurements of Collimator Effects in Proton and Neutron Radiation Testing for Single-Event Effects. *Belanger-Champagne, C.*, +, *TNS Jan. 2020 161-168*

Study of the Deposited Energy Spectra in Silicon by High-Energy Neutron and Mixed Fields. *Cazzaniga, C.*, +, *TNS Jan. 2020 175-180*

Neutron detection

⁶LiF:ZnS(Ag) Neutron Detector Performance Optimized Using Waveform Recordings and ROC Curves. *Pritchard, K.*, +, *TNS Jan. 2020 414-421*

A mm³ Fiber-Coupled Scintillator for In-Core Thermal Neutron Detection in CROCUS. *Vitullo, F.*, +, *TNS April 2020 625-635*

A Plutonium Mass Uncertainty Assessment Using a Cherenkov-Based Neutron Multiplicity Water Detector. *Asghari, A.*, +, *TNS Nov. 2020 2431-2438*

Boron-Coated Straws Imaging Panel Capability for Passive and Active Neutron Measurements of Radioactive Waste Drums. *Eleon, C.*, +, *TNS Sept. 2020 2096-2104*

Characterization of CLLBC Coupled to Silicon Photomultipliers. *Liang, F.*, +, *TNS June 2020 927-932*

Comparison Between Silicon Carbide and Diamond for Thermal Neutron Detection at Room Temperature. *Obraztsova, O.*, +, *TNS May 2020 863-871*

Crystal Growth and Scintillation Properties of Carbazole for Neutron Detection. *Yamaji, A.*, +, *TNS June 2020 1027-1031*

High-Resolution Gamma Spectrometry of a Plutonium Bearing Waste Drum With High-Energy Reaction-Induced Gamma Rays. *Bottau, V.*, +, *TNS April 2020 575-584*

High-Resolution Thermal Neutron Imaging With ¹⁰Boron/CsI:TI Scintillator Screen. *Miller, S.R.*, +, *TNS Aug. 2020 1929-1933*

High-Temperature Diamond Detector for Neutron Generator Output Monitoring in Well Logging Applications. *Amiyev, T.*, +, *TNS Aug. 2020 1885-1892*

Modified Texas Convention Method for Fast Neutron Flux Measurements. *Uhlar, R.*, +, *TNS Jan. 2020 382-388*

Monte Carlo Calculations of the Detection Efficiency of Composite Scintillator Arrays for Fast and Moderated Neutrons, and for Gamma-Ray Spectroscopy. *Derenzo, S.E.*, +, *TNS June 2020 888-893*

Neutron Detection Module Based on Li-Glass Scintillator and Array of SiPMs. *Wengrowicz, U.*, +, *TNS April 2020 599-602*

Optimization of the Charge Comparison Method for Multiradiation Field Using Various Measurement Systems. *Lynde, C.*, +, *TNS April 2020 679-687*

Optimizing the Sensitivity of a GAGG:Ce-Based Thermal Neutron Detector. *Taggart, M.P.*, +, *TNS April 2020 603-608*

Performance Assessment of Amplification and Discrimination Electronic Devices for Passive Neutron Measurements. *Ben Mosbah, M.*, +, *TNS April 2020 662-668*

Performance of a Position-Sensitive Neutron Scintillation Detector Based on Silicon Photomultipliers. *Kumar, S.*, +, *TNS June 2020 1169-1174*

Photocurrent From Single Collision 14-MeV Neutrons in GaN and GaAs. *Jasica, M.J.*, +, *TNS Jan. 2020 221-227*

Proton Light Yield of Fast Plastic Scintillators for Neutron Imaging. *Manfredi, J.J.*, +, *TNS Feb. 2020 434-442*

Silver-Doped LiI Crystal: A Sensitive Thermal Neutron Detector With Pulse Shape Discrimination. *Vuong, P.Q.*, +, *TNS Oct. 2020 2290-2294*

Simultaneous Estimation of Neutron Flux and Reactivity in Nuclear Reactors. *Mishra, A.K.*, +, *TNS Aug. 2020 1791-1802*

Study of Secondary Scattering/Albedo Neutron Fields and Their Impacts on SER as Function of Scene Topologies. *Hubert, G.*, +, *TNS Jan. 2020 201-209*

Study of the Deposited Energy Spectra in Silicon by High-Energy Neutron and Mixed Fields. *Cazzaniga, C.*, +, *TNS Jan. 2020 175-180*

Thermal Neutron Discrimination Using a Novel Phoswich Detector of Gd₃Ga₃Al₂O₁₂:Ce,B and CsI:TI Single Crystals. *Kalyani, .*, +, *TNS Nov. 2020 2415-2420*

Tl₂ZrCl₆ and Tl₂HfCl₆ Intrinsic Scintillators for Gamma Rays and Fast Neutron Detection. *Bhattacharya, P.*, +, *TNS June 2020 1032-1034*

X-Ray Detection Capabilities of Plastic Scintillators Incorporated With ZrO₂ Nanoparticles. *Toda, A.*, +, *TNS June 2020 983-987*

Neutron effects

A Chip-Level Single-Event Latchup (SEL) Estimation Methodology. *Neale, A.*, +, *TNS Jan. 2020 15-21*

A mm³ Fiber-Coupled Scintillator for In-Core Thermal Neutron Detection in CROCUS. *Vitullo, F.*, +, *TNS April 2020 625-635*

A Survey of the Analytical Methods of Proton-NIEL Calculations in Silicon and Germanium. *Akkerman, A.*, +, *TNS Aug. 2020 1813-1825*

Angular Sensitivity of Neutron-Induced Single-Event Upsets in 12-nm Fin-FET SRAMs With Comparison to 20-nm Planar SRAMs. *Kato, T.*, +, *TNS July 2020 1485-1493*

Assessment of On-Chip Current Sensor for Detection of Thermal-Neutron-Induced Transients. *Possamai Bastos, R.*, +, *TNS July 2020 1404-1411*

Atmospheric Neutron Radiation Response of III-V Binary Compound Semiconductors. *Autran, J.*, +, *TNS July 2020 1428-1435*

Comparison Between Silicon Carbide and Diamond for Thermal Neutron Detection at Room Temperature. *Obraztsova, O.*, +, *TNS May 2020 863-871*

COTS Optocoupler Radiation Qualification Process for LHC Applications Based on Mixed-Field Irradiations. *Ferraro, R.*, +, *TNS July 2020 1395-1403*

DCR Performance in Neutron-Irradiated CMOS SPADs From 150- to 180-nm Technologies. *Ratti, L.*, +, *TNS July 2020 1293-1301*

Displacement Damage Effects in InGaAs Photodiodes due to Electron, Proton, and Neutron Irradiations. *Nuns, T.*, +, *TNS July 2020 1263-1272*

Empirical Mathematical Model of Microprocessor Sensitivity and Early Prediction to Proton and Neutron Radiation-Induced Soft Errors. *Serrano-Cases, A.*, +, *TNS July 2020 1511-1520*

Error Detection and Mitigation of Data-Intensive Microprocessor Applications Using SIMD and Trace Monitoring. *Pena-Fernandez, M.*, +, *TNS July 2020 1452-1460*

Estimation of Residual Radioactivity and Radiation Damage in SiC After Neutron Irradiation. *Lee, K.*, +, *TNS July 2020 1374-1380*

Evaluation of an Operational Concept for Improving Radiation Tolerance of Single-Photon Avalanche Diode (SPAD) Arrays. *Smith, J.A.*, +, *TNS May 2020 797-804*

Evaluation of Soft-Error Tolerance by Neutrons and Heavy Ions on Flip Flops With Guard Gates in a 65-nm Thin BOX FDSOI Process. *Ebara, M.*, +, *TNS July 2020 1470-1477*

High Displacement Damage Dose Effects in Radiation Hardened CMOS Image Sensors. *Rizzolo, S.*, +, *TNS July 2020 1256-1262*

High-Energy Versus Thermal Neutron Contribution to Processor and Memory Error Rates. *Oliveira, D.*, +, *TNS June 2020 1161-1168*

Impact of Electrical Stress and Neutron Irradiation on Reliability of Silicon Carbide Power MOSFET. *Niskanen, K.*, +, *TNS July 2020 1365-1373*

Improving Selective Fault Tolerance in GPU Register Files by Relaxing Application Accuracy. *Goncalves, M.M.*, +, *TNS July 2020 1573-1580*

Improving the Reliability of TMR With Nontriplicated I/O on SRAM FPGAs. *Cannon, M.J.*, +, *TNS Jan. 2020 312-320*

Irradiation Tests of Optical Fibers and Cables Devoted to Corium Monitoring in Case of a Severe Accident in a Nuclear Power Plant. *Cheyamol, G.*, +, *TNS April 2020 669-678*

Measured Energy-Dependent Neutron Attenuation Through the Stacked Printed Circuit Boards. *Wender, S.A.*, +, *TNS June 2020 1114-1117*

Measurement of Single-Event Upsets in 65-nm SRAMs Under Irradiation of Spallation Neutrons at J-PARC MLF. *Kuroda, J.*, +, *TNS July 2020 1599-1605*

Neutron-Induced Radiation Damage in LYSO, BaF₂, and PWO Crystals. *Hu, C.*, +, *TNS June 2020 1086-1092*

Performance of a Position-Sensitive Neutron Scintillation Detector Based on Silicon Photomultipliers. *Kumar, S.*, +, *TNS June 2020 1169-1174*

Phosphorus Versus Arsenic: Role of the Photodiode Doping Element in CMOS Image Sensor Radiation-Induced Dark Current and Random Telegraph Signal. *Le Roch, A.*, +, *TNS July 2020 1241-1250*

Photocurrent From Single Collision 14-MeV Neutrons in GaN and GaAs. *Jasica, M.J.*, +, *TNS Jan. 2020 221-227*

Radiation Effects on FR4 Printed Circuit Boards. *Scheuer, K.*, +, *TNS Aug. 2020 1846-1851*

Radiation Resistance of Single-Mode Optical Fibers at $\lambda = 1.55 \mu\text{m}$ Under Irradiation at IVG.1M Nuclear Reactor. *Kashaykin, P.F.*, +, *TNS Oct. 2020 2162-2171*

Radiation-Induced Variable Retention Time in Dynamic Random Access Memories. *Goiffon, V.*, +, *TNS Jan. 2020 234-244*

Response of Waveguide-Integrated Germanium-on-Silicon p-i-n Photodiodes to Neutron Displacement Damage. *Goley, P.S.*, +, *TNS Jan. 2020 296-304*

The Use of Microprocessor Trace Infrastructures for Radiation-Induced Fault Diagnosis. *Pena-Fernandez, M.*, +, *TNS Jan. 2020 126-134*

Thermal Neutron-Induced SEUs in the LHC Accelerator Environment. *Cecchetto, M.*, +, *TNS July 2020 1412-1420*

Understanding the Key Parameter Dependences Influencing the Soft-Error Susceptibility of Standard Combinational Logic. *Pande, N.*, +, *TNS Jan. 2020 116-125*

Neutron flux

A mm³ Fiber-Coupled Scintillator for In-Core Thermal Neutron Detection in CROCUS. *Vitullo, F.*, +, *TNS April 2020 625-635*

Comparison Between Silicon Carbide and Diamond for Thermal Neutron Detection at Room Temperature. *Obratsova, O.*, +, *TNS May 2020 863-871*

Experimental Study on Displacement Damage Effects of Anode-Short MOS-Controlled Thyristor. *Li, L.*, +, *TNS March 2020 508-517*

Gamma-Heating and Gamma Flux Measurements in the JSI TRIGA Reactor: Results and Prospects. *Gruel, A.*, +, *TNS April 2020 559-567*

Integral Sliding Mode for Power Distribution Control of Advanced Heavy Water Reactor. *Desai, R.J.*, +, *TNS June 2020 1076-1085*

Modified Texas Convention Method for Fast Neutron Flux Measurements. *Uhlar, R.*, +, *TNS Jan. 2020 382-388*

Nuclear Data Covariance Analysis in Radiation-Transport Simulations Utilizing SCALE Sampler and the IRDFF Nuclear Data Library. *Quartemont, N.J.*, +, *TNS March 2020 482-491*

Performance of a Position-Sensitive Neutron Scintillation Detector Based on Silicon Photomultipliers. *Kumar, S.*, +, *TNS June 2020 1169-1174*

Simultaneous Estimation of Neutron Flux and Reactivity in Nuclear Reactors. *Mishra, A.K.*, +, *TNS Aug. 2020 1791-1802*

Study of the Data Acquisition System for ITER Divertor Neutron Flux Monitor Diagnostic. *Fedorov, V.A.*, +, *TNS April 2020 688-693*

Neutron moderation

Monte Carlo Calculations of the Detection Efficiency of Composite Scintillator Arrays for Fast and Moderated Neutrons, and for Gamma-Ray Spectroscopy. *Derenzo, S.E.*, +, *TNS June 2020 888-893*

Neutron radiative capture

Estimation of Residual Radioactivity and Radiation Damage in SiC After Neutron Irradiation. *Lee, K.*, +, *TNS July 2020 1374-1380*

High-Temperature Diamond Detector for Neutron Generator Output Monitoring in Well Logging Applications. *Anniyev, T.*, +, *TNS Aug. 2020 1885-1892*

Neutron sources

Boron-Coated Straws Imaging Panel Capability for Passive and Active Neutron Measurements of Radioactive Waste Drums. *Eleon, C.*, +, *TNS Sept. 2020 2096-2104*

Estimation of Residual Radioactivity and Radiation Damage in SiC After Neutron Irradiation. *Lee, K.*, +, *TNS July 2020 1374-1380*

High-Temperature Diamond Detector for Neutron Generator Output Monitoring in Well Logging Applications. *Anniyev, T.*, +, *TNS Aug. 2020 1885-1892*

Measurement of Single-Event Upsets in 65-nm SRAMs Under Irradiation of Spallation Neutrons at J-PARC MLF. *Kuroda, J.*, +, *TNS July 2020 1599-1605*

Modified Texas Convention Method for Fast Neutron Flux Measurements. *Uhlar, R.*, +, *TNS Jan. 2020 382-388*

Performance Assessment of Amplification and Discrimination Electronic Devices for Passive Neutron Measurements. *Ben Mosbah, M.*, +, *TNS April 2020 662-668*

Proton Light Yield of Fast Plastic Scintillators for Neutron Imaging. *Manfredi, J.J.*, +, *TNS Feb. 2020 434-442*

Study of the Deposited Energy Spectra in Silicon by High-Energy Neutron and Mixed Fields. *Cazzaniga, C.*, +, *TNS Jan. 2020 175-180*

Neutron spectra

Measurement of Single-Event Upsets in 65-nm SRAMs Under Irradiation of Spallation Neutrons at J-PARC MLF. *Kuroda, J.*, +, *TNS July 2020 1599-1605*

Nuclear Data Covariance Analysis in Radiation-Transport Simulations Utilizing SCALE Sampler and the IRDFF Nuclear Data Library. *Quartemont, N.J.*, +, *TNS March 2020 482-491*

Study of Secondary Scattering/Albedo Neutron Fields and Their Impacts on SER as Function of Scene Topologies. *Hubert, G.*, +, *TNS Jan. 2020 201-209*

Neutron spectrometers

Study of Secondary Scattering/Albedo Neutron Fields and Their Impacts on SER as Function of Scene Topologies. *Hubert, G.*, +, *TNS Jan. 2020 201-209*

Study of the Deposited Energy Spectra in Silicon by High-Energy Neutron and Mixed Fields. *Cazzaniga, C.*, +, *TNS Jan. 2020 175-180*

Neutron transport theory

Nuclear Data Covariance Analysis in Radiation-Transport Simulations Utilizing SCALE Sampler and the IRDFF Nuclear Data Library. *Quartemont, N.J.*, +, *TNS March 2020 482-491*

Neutron-nucleus reactions

Monte Carlo Calculations of the Detection Efficiency of Composite Scintillator Arrays for Fast and Moderated Neutrons, and for Gamma-Ray Spectroscopy. *Derenzo, S.E.*, +, *TNS June 2020 888-893*

Neutrons

Electron, Neutron, and Proton Irradiation Effects on SiC Radiation Detectors. *Rafi, J.M.*, +, *TNS Dec. 2020 2481-2489*

Energy-Resolved Soft-Error Rate Measurements for 1–800 MeV Neutrons by the Time-of-Flight Technique at LANSCE. *Iwashita, H.*, +, *TNS Nov. 2020 2363-2369*

Experimental and Analytical Study of the Responses of Nanoscale Devices to Neutrons Impinging at Various Incident Angles. *Korkian, G.*, +, *TNS Nov. 2020 2345-2352*

Failure Analysis of Galaxy S7 Edge Smartphone Using Neutron Radiation. *Bak, G.*, +, *TNS Nov. 2020 2370-2381*

Niobium

Continuous Wave Operation of Superconducting Accelerating Cavities With High Loaded Quality Factor. *Cichalewski, W.*, +, *TNS Sept. 2020 2119-2127*

Noise measurement

High-Fluence Proton-Induced Degradation on AlGaIn/GaN High-Electron-Mobility Transistors. *Yue, S.*, +, *TNS July 2020 1339-1344*

Ionizing-Radiation Response and Low-Frequency Noise of 28-nm MOS-FETs at Ultrahigh Doses. *Bonaldo, S.*, +, *TNS July 2020 1302-1311*

Total-Ionizing-Dose Effects and Low-Frequency Noise in 16-nm InGaAs FinFETs With $\text{HfO}_2/\text{Al}_2\text{O}_3$ Dielectrics. *Bonaldo, S.*, +, *TNS Jan. 2020 210-220*

Total-Ionizing-Dose Effects, Border Traps, and $1/f$ Noise in Emerging MOS Technologies. *Fleetwood, D.M.*, *TNS July 2020 1216-1240*

Nondestructive testing

CdZnTe-Based X-Ray Spectrometer for Absolute Density Determination. *Zambelli, N.*, +, *TNS Oct. 2020 2273-2277*

Collimator-Less Passive Gamma Scanning for Radioactive Waste Drums. *Vax, E.*, +, *TNS April 2020 544-551*

Risk Methodology for SEE Caused by Proton-Induced Fission of High-Z Materials in Microelectronic Packaging. *Ladbury, R.*, *TNS June 2020 1152-1160*

Nonvolatile memory

Experimental and Analytical Study of the Responses of Nanoscale Devices to Neutrons Impinging at Various Incident Angles. *Korkian, G.*, +, *TNS Nov. 2020 2345-2352*

Nuclear electronics

A 4-MHz, 256-Channel Readout ASIC for Column-Parallel CCDs With 78.7-dB Dynamic Range. *Grace, C.R.*, +, *TNS May 2020 823-831*

A DAQ Upgrade Solution for Belle II Experiment. *Liu, Z.*, +, *TNS Aug. 2020 1904-1911*

A Method to Restrain Parameter Drift in Trapezoidal Pulse Shaping. *Wengang, S.*, +, *TNS July 2020 1710-1714*

A mm^3 Fiber-Coupled Scintillator for In-Core Thermal Neutron Detection in CROCUS. *Vitullo, F.*, +, *TNS April 2020 625-635*

COTS Optocoupler Radiation Qualification Process for LHC Applications Based on Mixed-Field Irradiations. *Ferraro, R.*, +, *TNS July 2020 1395-1403*

Design and Characterization of the CLICTD Pixelated Monolithic Sensor Chip. *Kremastiotis, I.*, +, *TNS Oct. 2020 2263-2272*

Design and Experimental Validation of an Integrated Multichannel Charge Amplifier for Solid-State Detectors With Innovative Spectroscopic Range Booster. *Capra, S.*, +, *TNS Aug. 2020 1877-1884*

Design and Performance of Data Acquisition and Control System for the Muon $g-2$ Laser Calibration. *Mastroianni, S.*, +, *TNS May 2020 832-839*

Design and Testing of the Address in Real-Time Data Driver Card for the Micromegas Detector of the ATLAS New Small Wheel Upgrade. *Yao, L.*, +, *TNS Sept. 2020 2155-2160*

Design Studies of High-Resolution Readout Planes Using Zigzags With GEM Detectors. *Azmoun, B.*, +, *TNS Aug. 2020 1869-1876*

Development of a High-Rate Front-End ASIC for X-Ray Spectroscopy and Diffraction Applications. *Vernon, E.*, +, *TNS April 2020 752-759*

Front-End Electronics for the SiPM-Readout Gaseous TPC for Neutrinoless Double-Beta Decay Search. *Nakamura, K.Z.*, +, *TNS July 2020 1772-1776*

Hexagonal Pad Multichannel Ge X-Ray Spectroscopy Detector Demonstrator: Comprehensive Characterization. *Tartoni, N.*, +, *TNS Aug. 2020 1952-1961*

Impedance and Noise Closed-Form Model of Large-Area Integrated Resistors With High Stray Capacitance to be Used as Feedback Discharge

Devices in Charge-Sensitive Preamplifiers for Nuclear Spectroscopy. *Capra, S.*, *TNS April 2020 722-731*

Least Mean Squares Filters Suppressing the Radio-Frequency Interference in AERA Cosmic Ray Radio Detection. *Szadkowski, Z.*, *TNS Jan. 2020 405-413*

Low-Energy Protons—Where and Why “Rare Events” Matter. *Rodbell, K.P.*, *TNS July 2020 1204-1215*

Neutron-Induced Radiation Damage in LYSO, BaF_2 , and PWO Crystals. *Hu, C.*, +, *TNS June 2020 1086-1092*

Performance Assessment of Amplification and Discrimination Electronic Devices for Passive Neutron Measurements. *Ben Mosbah, M.*, +, *TNS April 2020 662-668*

Performance Study of the First 2-D Prototype of Vertically Integrated Pattern Recognition Associative Memory. *Deptuch, G.*, +, *TNS Sept. 2020 2111-2118*

Phase I Upgrade of the Readout System of the Vertex Detector at the LHCb Experiment. *Fernandez Prieto, A.*, +, *TNS April 2020 732-739*

Pile-Up Correction in Spectroscopic Signals Using Regularized Sparse Reconstruction. *Kafae, M.*, +, *TNS May 2020 858-862*

Precision Timing in the CMS MTD Barrel Timing Layer With Crystal Bars and SiPMs. *Santanastasio, F.*, *TNS Sept. 2020 2105-2110*

Progress on the Electromagnetic Calorimeter Trigger Simulation at the Belle II Experiment. *Lee, I.S.*, +, *TNS Sept. 2020 2143-2147*

Proton- and Neutron-Induced Single-Event Upsets in FPGAs for the PANDA Experiment. *Preston, M.*, +, *TNS June 2020 1093-1106*

Radiation Environment in the LHC Arc Sections During Run 2 and Future HL-LHC Operations. *Bilko, K.*, +, *TNS July 2020 1682-1690*

Radiation-Hardened Sensor Interface Circuit for Monitoring Severe Accidents in Nuclear Power Plants. *Jeon, H.*, +, *TNS July 2020 1738-1745*

Shunt Regulator for the Serial Powering of the ATLAS CMOS Pixel Detector Modules. *Habib, A.*, +, *TNS Feb. 2020 455-463*

SiT: A Strip-Sensor Readout Chip With Subnanosecond Time Walk for the J-PARC Muon $g-2$ /EDM Experiment. *Kishishita, T.*, +, *TNS Sept. 2020 2089-2095*

Study of the Deposited Energy Spectra in Silicon by High-Energy Neutron and Mixed Fields. *Cazzaniga, C.*, +, *TNS Jan. 2020 175-180*

TERA: Throughput-Enhanced Readout ASIC for High-Rate Energy-Dispersive X-Ray Detection. *Hafizh, I.*, +, *TNS July 2020 1746-1759*

The Mu2e e.m. Calorimeter: Crystals and SiPMs Production Status. *Atanov, N.*, +, *TNS June 2020 978-982*

The Pion Single-Event Effect Resonance and its Impact in an Accelerator Environment. *Coronetti, A.*, +, *TNS July 2020 1606-1613*

Thermal Neutron-Induced SEUs in the LHC Accelerator Environment. *Cecchetto, M.*, +, *TNS July 2020 1412-1420*

Time Resolution Measurements of EJ-232Q With Single- and Dual-Sided Readouts. *Wen, X.*, +, *TNS Sept. 2020 2081-2088*

Timepix3 Luminosity Determination of 13-TeV Proton-Proton Collisions at the ATLAS Experiment. *Sopczak, A.*, *TNS April 2020 609-616*

Nuclear energy levels

Heavy Ion Nuclear Reaction Impact on SEE Testing: From Standard to Ultra-high Energies. *Wyrwoll, V.*, +, *TNS July 2020 1590-1598*

Nuclear engineering computing

In Situ Gas Monitoring by Fiber-Coupled Raman Spectrometry for H_2 -Risk Management in Nuclear Containment During a Severe Nuclear Accident. *Magne, S.*, +, *TNS April 2020 617-624*

Automatic and Real-Time Identification of Radionuclides in Gamma-Ray Spectra: A New Method Based on Convolutional Neural Network Trained With Synthetic Data Set. *Daniel, G.*, +, *TNS April 2020 644-653*

Nuclear Data Covariance Analysis in Radiation-Transport Simulations Utilizing SCALE Sampler and the IRDFF Nuclear Data Library. *Quartemont, N.J.*, +, *TNS March 2020 482-491*

Nuclear fragmentation

Heavy Ion Nuclear Reaction Impact on SEE Testing: From Standard to Ultra-high Energies. *Wyrwoll, V.*, +, *TNS July 2020 1590-1598*

Nuclear materials safeguards

Simulated X-Ray Radiographic Performance of a Bismuth-Loaded PVT Array. *Decker, A.W.*, +, *TNS Nov. 2020 2329-2336*

Nuclear power

Evaluation of Low Dose Silicon Carbide Temperature Monitors. *Davis, K.L.*, +, *TNS April 2020 585-591*

Nuclear power stations

In Situ Gas Monitoring by Fiber-Coupled Raman Spectrometry for H₂-Risk Management in Nuclear Containment During a Severe Nuclear Accident. *Magne, S.*, +, *TNS April 2020 617-624*

Cascaded HTGR Power-Level Control Only by Regulating Primary Helium Flow Rate. *Dong, Z.*, +, *TNS Aug. 2020 1780-1790*

Qualification of Hardware Description Language Designs for Safety Critical Applications in Nuclear Power Plants. *John, A.K.*, +, *TNS March 2020 502-507*

Radiation Resistance of Single-Mode Optical Fibers at $\lambda = 1.55 \mu\text{m}$ Under Irradiation at IVG.1M Nuclear Reactor. *Kashaykin, P.F.*, +, *TNS Oct. 2020 2162-2171*

Radiation-Hardened Sensor Interface Circuit for Monitoring Severe Accidents in Nuclear Power Plants. *Jeon, H.*, +, *TNS July 2020 1738-1745*

Unmanned Radiation-Monitoring System. *Cerba, S.*, +, *TNS April 2020 636-643*

Nuclear spallation

Low-Energy Protons—Where and Why “Rare Events” Matter. *Rodbell, K.P.*, *TNS July 2020 1204-1215*

O**Obituaries**

In Memoriam Bobby L. Buchanan (1931–2018). *TNS Jan. 2020 14*

Oceanographic techniques

How Much Do Solar Cycle Variations Impact Long-Term Effect Predictions at LEO?. *Bourdarie, S.*, +, *TNS Oct. 2020 2196-2202*

Operational amplifiers

Analysis of SET Propagation in a System in Package Point of Load Converter. *Rajkowski, T.*, +, *TNS July 2020 1494-1502*

New Approach for Pulsed-Laser Testing That Mimics Heavy-Ion Charge Deposition Profiles. *Hales, J.M.*, +, *TNS Jan. 2020 81-90*

Optical communication equipment

Radiation Effects on WDM and DWDM Architectures of Preamplifier and Boost-Amplifier. *Aubry, M.*, +, *TNS Jan. 2020 278-283*

Optical constants

Characterization of Silver-Doped LiF Crystal Grown by Czochralski Technique for Dark Matter Search Application. *Pandey, I.R.*, +, *TNS June 2020 915-921*

Optical couplers

Response of Waveguide-Integrated Germanium-on-Silicon p-i-n Photodiodes to Neutron Displacement Damage. *Goley, P.S.*, +, *TNS Jan. 2020 296-304*

Optical fabrication

DCR Performance in Neutron-Irradiated CMOS SPADs From 150- to 180-nm Technologies. *Ratti, L.*, +, *TNS July 2020 1293-1301*

Optical fiber amplifiers

Radiation Effects on WDM and DWDM Architectures of Preamplifier and Boost-Amplifier. *Aubry, M.*, +, *TNS Jan. 2020 278-283*

Optical fiber cables

Corrections to “Irradiation Tests of Optical Fibers and Cables Devoted to Corium Monitoring in Case of a Severe Accident in a Nuclear Power Plant”. *Cheymol, G.*, +, *TNS June 2020 1195*

Optical fiber cladding

Radiation Resistance of Single-Mode Optical Fibers at $\lambda = 1.55 \mu\text{m}$ Under Irradiation at IVG.1M Nuclear Reactor. *Kashaykin, P.F.*, +, *TNS Oct. 2020 2162-2171*

Remote Measurements of X-Rays Dose Rate Using a Cerium-Doped Air-Clad Optical Fiber. *Bahout, J.*, +, *TNS July 2020 1658-1662*

Optical fiber communication

Radiation Effects on WDM and DWDM Architectures of Preamplifier and Boost-Amplifier. *Aubry, M.*, +, *TNS Jan. 2020 278-283*

Optical fiber fabrication

Radiation Response of Distributed Feedback Bragg Gratings for Space Applications. *Morana, A.*, +, *TNS Jan. 2020 284-288*

Transient and Steady-State Radiation Response of Phosphosilicate Optical Fibers: Influence of H₂ Loading. *Girard, S.*, +, *TNS Jan. 2020 289-295*

Optical fiber losses

Radiation Resistance of Single-Mode Optical Fibers at $\lambda = 1.55 \mu\text{m}$ Under Irradiation at IVG.1M Nuclear Reactor. *Kashaykin, P.F.*, +, *TNS Oct. 2020 2162-2171*

Steady-State X-Ray Radiation-Induced Attenuation in Canonical Optical Fibers. *De Michele, V.*, +, *TNS July 2020 1650-1657*

Transient and Steady-State Radiation Response of Phosphosilicate Optical Fibers: Influence of H₂ Loading. *Girard, S.*, +, *TNS Jan. 2020 289-295*

Optical fiber testing

Combined Temperature and Radiation Effects on Radiation-Sensitive Single-Mode Optical Fibers. *Campanella, C.*, +, *TNS July 2020 1643-1649*

Irradiation Tests of Optical Fibers and Cables Devoted to Corium Monitoring in Case of a Severe Accident in a Nuclear Power Plant. *Cheymol, G.*, +, *TNS April 2020 669-678*

Radiation Resistance of Single-Mode Optical Fibers at $\lambda = 1.55 \mu\text{m}$ Under Irradiation at IVG.1M Nuclear Reactor. *Kashaykin, P.F.*, +, *TNS Oct. 2020 2162-2171*

Steady-State X-Ray Radiation-Induced Attenuation in Canonical Optical Fibers. *De Michele, V.*, +, *TNS July 2020 1650-1657*

Optical fibers

Corrections to “Irradiation Tests of Optical Fibers and Cables Devoted to Corium Monitoring in Case of a Severe Accident in a Nuclear Power Plant”. *Cheymol, G.*, +, *TNS June 2020 1195*

Remote Measurements of X-Rays Dose Rate Using a Cerium-Doped Air-Clad Optical Fiber. *Bahout, J.*, +, *TNS July 2020 1658-1662*

Optical glass

Irradiation Tests of Optical Fibers and Cables Devoted to Corium Monitoring in Case of a Severe Accident in a Nuclear Power Plant. *Cheymol, G.*, +, *TNS April 2020 669-678*

Radiation Effects on WDM and DWDM Architectures of Preamplifier and Boost-Amplifier. *Aubry, M.*, +, *TNS Jan. 2020 278-283*

Transient and Steady-State Radiation Response of Phosphosilicate Optical Fibers: Influence of H₂ Loading. *Girard, S.*, +, *TNS Jan. 2020 289-295*

Optical links

ADAQ Upgrade Solution for Belle II Experiment. *Liu, Z.*, +, *TNS Aug. 2020 1904-1911*

Optical modulation

Electronic-to-Photonic Single-Event Transient Propagation in a Segmented Mach-Zehnder Modulator in a Si/SiGe Integrated Photonics Platform. *Tzintzarov, G.N.*, +, *TNS Jan. 2020 260-267*

Optical polymers

Radiation Resistance of Single-Mode Optical Fibers at $\lambda = 1.55 \mu\text{m}$ Under Irradiation at IVG.1M Nuclear Reactor. *Kashaykin, P.F.*, +, *TNS Oct. 2020 2162-2171*

Optical properties

Comparison of X-Ray and Proton Irradiation Effects on the Characteristics of InGaN/GaN Multiple Quantum Wells Light-Emitting Diodes. *Wang, L.*, +, *TNS July 2020 1345-1350*

Optical radar

Proximity-Based Sensor Fusion of Depth Cameras and Isotropic Rad-Detectors. *Henderson, K.*, +, *TNS May 2020 840-857*

Optical testing

DCR Performance in Neutron-Irradiated CMOS SPADs From 150- to 180-nm Technologies. *Ratti, L.*, +, *TNS July 2020 1293-1301*

Optical variables measurement

Reflectance of Silicon Photomultipliers at Vacuum Ultraviolet Wavelengths. *Lv, P.*, +, *TNS Dec. 2020 2501-2510*

Optical waveguides

Response of Waveguide-Integrated Germanium-on-Silicon p-i-n Photodiodes to Neutron Displacement Damage. *Goley, P.S.*, +, *TNS Jan. 2020 296-304*

Optimal control

Integral Sliding Mode for Power Distribution Control of Advanced Heavy Water Reactor. *Desai, R.J.*, +, *TNS June 2020 1076-1085*

Opto-isolators

COTS Optocoupler Radiation Qualification Process for LHC Applications Based on Mixed-Field Irradiations. *Ferraro, R.*, +, *TNS July 2020 1395-1403*

Organic compounds

Crystal Growth and Scintillation Properties of Carbazole for Neutron Detection. *Yamaji, A.*, +, *TNS June 2020 1027-1031*

Development of Tin-Based Single Crystal Scintillator for Double-Beta Decay Experiments. *Aryal, P.*, +, *TNS June 2020 922-926*

X-Ray Detection Capabilities of Plastic Scintillators Incorporated With ZrO₂ Nanoparticles. *Toda, A.*, +, *TNS June 2020 983-987*

Oxidation

Improved Model for Ionization-Induced Surface Recombination Current in p-n-p BJTs. *Li, L.*, +, *TNS Aug. 2020 1826-1834*

Total Ionizing Dose Effects in 30-V Split-Gate Trench VDMOS. *Wang, R.*, +, *TNS Sept. 2020 2009-2014*

P**P-i-n photodiodes**

Response of Waveguide-Integrated Germanium-on-Silicon p-i-n Photodiodes to Neutron Displacement Damage. *Goley, P.S.*, +, *TNS Jan. 2020 296-304*

Single-Event Effects in Pinned Photodiode CMOS Image Sensors: SET and SEL. *Cai, Y.*, +, *TNS Aug. 2020 1861-1868*

P-n junctions

Comparison of X-Ray and Proton Irradiation Effects on the Characteristics of InGaN/GaN Multiple Quantum Wells Light-Emitting Diodes. *Wang, L.*, +, *TNS July 2020 1345-1350*

Heavy-Ion Microbeam Studies of Single-Event Leakage Current Mechanism in SiC VD-MOSFETs. *Martinella, C.*, +, *TNS July 2020 1381-1389*

Paramagnetic resonance

Transient and Steady-State Radiation Response of Phosphosilicate Optical Fibers: Influence of H₂ Loading. *Girard, S.*, +, *TNS Jan. 2020 289-295*

Particle accelerators

COTS Optocoupler Radiation Qualification Process for LHC Applications Based on Mixed-Field Irradiations. *Ferraro, R.*, +, *TNS July 2020 1395-1403*

The Pion Single-Event Effect Resonance and its Impact in an Accelerator Environment. *Coronetti, A.*, +, *TNS July 2020 1606-1613*

Thermal Neutron-Induced SEUs in the LHC Accelerator Environment. *Cecchetto, M.*, +, *TNS July 2020 1412-1420*

Particle beam bunching

Design Process for Synchrotron RF Cavities Loaded With Magnetic Ring Cores. *Klingbeil, H.*, +, *TNS Jan. 2020 361-368*

Timepix3 Luminosity Determination of 13-TeV Proton-Proton Collisions at the ATLAS Experiment. *Sopczak, A.*, *TNS April 2020 609-616*

Particle beam diagnostics

Longitudinal and Transverse Measurement to Evaluate the Beam Impedance on a Ceramic Ring-Loaded Thin-Wall Vacuum Chamber in BRing at HIAF. *Zhu, G.*, +, *TNS July 2020 1702-1709*

Radiation Environment in the LHC Arc Sections During Run 2 and Future HL-LHC Operations. *Bilko, K.*, +, *TNS July 2020 1682-1690*

Particle beam injection

A 150-kW Pulse Solid-State Amplifier for Radio Frequency Quadrupole Application. *Jain, A.*, +, *TNS Nov. 2020 2303-2310*

Design of Electromagnetic Bandgap Cavities for High-Gradient On-Axis Coupled-Cavity Linear Accelerators. *Laneve, D.*, +, *TNS May 2020 768-776*

Particle beam stability

Longitudinal and Transverse Measurement to Evaluate the Beam Impedance on a Ceramic Ring-Loaded Thin-Wall Vacuum Chamber in BRing at HIAF. *Zhu, G.*, +, *TNS July 2020 1702-1709*

Particle beams

Failure Analysis of Galaxy S7 Edge Smartphone Using Neutron Radiation. *Bak, G.*, +, *TNS Nov. 2020 2370-2381*

Particle calorimetry

Crystal Fibers for the LHCb Calorimeter Upgrade. *Martinazzoli, L.*, *TNS June 2020 1003-1008*

Design and Performance of Data Acquisition and Control System for the Muon g-2 Laser Calibration. *Mastroianni, S.*, +, *TNS May 2020 832-839*

Progress on the Electromagnetic Calorimeter Trigger Simulation at the Belle II Experiment. *Lee, I.S.*, +, *TNS Sept. 2020 2143-2147*

Proton- and Neutron-Induced Single-Event Upsets in FPGAs for the PANDA Experiment. *Preston, M.*, +, *TNS June 2020 1093-1106*

Qualification of a New Differential Calorimeter Configuration Dedicated to Nuclear Heating Rates up to 20 W.g⁻¹. *Volte, A.*, +, *TNS Nov. 2020 2405-2414*

Response of the BGO Calorimeter to Cosmic-Ray Nuclei in the DAMPE Experiment on Orbit. *Dai, H.T.*, +, *TNS June 2020 956-961*

Stimulated Recovery of the Radiation Damage in Lead Tungstate Crystals. *Orsich, P.*, +, *TNS June 2020 952-955*

The Mu2e e.m. Calorimeter: Crystals and SiPMs Production Status. *Atanov, N.*, +, *TNS June 2020 978-982*

The Quenching Effect of BGO Crystals on Relativistic Heavy Ions in the DAMPE Experiment. *Wei, Y.*, +, *TNS June 2020 939-945*

Particle detectors

A Heavy-Ion Detector Based on 3-D NAND Flash Memories. *Bagatin, M.*, +, *TNS Jan. 2020 154-160*

Charging Monitor Aboard the Geostationary Satellite GK2A at 128.2° E Longitude. *Woo, J.*, +, *TNS April 2020 740-745*

New SEU Modeling Method for Calibrating Target System to Multiple Radiation Particles. *Caron, P.*, +, *TNS Jan. 2020 44-49*

Particle tracks

Sensitivity of Silicon Photomultipliers to Direct Gamma Ray Irradiation. *Lavelle, C.M.*, +, *TNS Jan. 2020 389-399*

Passivation

Comparison of Back-Thinned Detector Ultraviolet Quantum Efficiency for Two Commercially Available Passivation Treatments. *Heymes, J.*, +, *TNS Aug. 2020 1962-1967*

Improved Model for Ionization-Induced Surface Recombination Current in p-n-p BJTs. *Li, L.*, +, *TNS Aug. 2020 1826-1834*

Pattern recognition

Performance Study of the First 2-D Prototype of Vertically Integrated Pattern Recognition Associative Memory. *Deptuch, G.*, +, *TNS Sept. 2020 2111-2118*

Permittivity

Radiation Effects on FR4 Printed Circuit Boards. *Scheuer, K.*, +, *TNS Aug. 2020 1846-1851*

Phantoms

Compton Background Elimination for in Vivo X-Ray Fluorescence Imaging of Gold Nanoparticles Using Convolutional Neural Network. *Jung, S.*, +, *TNS Nov. 2020 2311-2320*

Phase locked loops

Ionizing Radiation Effects Spectroscopy for Analysis of Single-Event Transients. *Loveless, T.D.*, +, *TNS Jan. 2020 99-107*

Radiation Hardened by Design Subsampling Phase-Locked Loop Techniques in PD-SOI. *Richards, E.W.*, +, *TNS June 2020 1144-1151*

Single-Event Effects Characterization of LC-VCO PLLs in a 28-nm CMOS Technology. *Zhang, Z.*, +, *TNS Sept. 2020 2042-2050*

Phase measurement

Phase Drift Compensating RF Link for Femtosecond Synchronization of E-XFEL. *Sikora, D.*, +, *TNS Sept. 2020 2136-2142*

Phonons

A Survey of the Analytical Methods of Proton-NIEL Calculations in Silicon and Germanium. *Akkerman, A.*, +, *TNS Aug. 2020 1813-1825*

Phosphorus

Combined Temperature and Radiation Effects on Radiation-Sensitive Single-Mode Optical Fibers. *Campanella, C.*, +, *TNS July 2020 1643-1649*

Phosphorus Versus Arsenic: Role of the Photodiode Doping Element in CMOS Image Sensor Radiation-Induced Dark Current and Random Telegraph Signal. *Le Roch, A.*, +, *TNS July 2020 1241-1250*

Steady-State X-Ray Radiation-Induced Attenuation in Canonical Optical Fibers. *De Michele, V.*, +, *TNS July 2020 1650-1657*

Phosphosilicate glasses

Radiation Effects on WDM and DWDM Architectures of Pre-amplifier and Boost-Amplifier. *Aubry, M.*, +, *TNS Jan. 2020 278-283*

Transient and Steady-State Radiation Response of Phosphosilicate Optical Fibers: Influence of H₂ Loading. *Girard, S.*, +, *TNS Jan. 2020 289-295*

Photocathodes

A Photomultiplier With an AlGaIn Photocathode and Microchannel Plates for BaF₂ Scintillator Detectors in Particle Physics. *Atanov, N.*, +, *TNS July 2020 1760-1764*

Modeling Photocathode Performance Using Medea-VASP Simulation Software. *Williams, J.O.D.*, +, *TNS Sept. 2020 1987-1992*

Photoconducting materials

Effects of High-Dose X-Ray Irradiation on the Hole Lifetime in Vacuum-Deposited Stabilized a-Se Photoconductive Films: Implications to the Quality Control of a-Se Used in X-Ray Detectors. *Simonson, B.*, +, *TNS Nov. 2020 2445-2453*

Photoconductivity

Effects of High-Dose X-Ray Irradiation on the Hole Lifetime in Vacuum-Deposited Stabilized a-Se Photoconductive Films: Implications to the Quality Control of a-Se Used in X-Ray Detectors. *Simonson, B.*, +, *TNS Nov. 2020 2445-2453*

Photocurrent From Single Collision 14-MeV Neutrons in GaN and GaAs. *Jasica, M.J.*, +, *TNS Jan. 2020 221-227*

Photodetectors

A Photomultiplier With an AlGaIn Photocathode and Microchannel Plates for BaF₂ Scintillator Detectors in Particle Physics. *Atanov, N.*, +, *TNS July 2020 1760-1764*

Comparison of Back-Thinned Detector Ultraviolet Quantum Efficiency for Two Commercially Available Passivation Treatments. *Heymes, J.*, +, *TNS Aug. 2020 1962-1967*

DCR Performance in Neutron-Irradiated CMOS SPADs From 150- to 180-nm Technologies. *Ratti, L.*, +, *TNS July 2020 1293-1301*

Design and Performance of Data Acquisition and Control System for the Muon g-2 Laser Calibration. *Mastroianni, S.*, +, *TNS May 2020 832-839*

High-Resolution Thermal Neutron Imaging With ¹⁰Boron/CsI:TI Scintillator Screen. *Miller, S.R.*, +, *TNS Aug. 2020 1929-1933*

Monte Carlo Calculations of the Detection Efficiency of Composite Scintillator Arrays for Fast and Moderated Neutrons, and for Gamma-Ray Spectroscopy. *Derenzo, S.E.*, +, *TNS June 2020 888-893*

Precision Timing in the CMS MTD Barrel Timing Layer With Crystal Bars and SiPMs. *Santanastasio, F.*, *TNS Sept. 2020 2105-2110*

Reflectance of Silicon Photomultipliers at Vacuum Ultraviolet Wavelengths. *Lv, P.*, +, *TNS Dec. 2020 2501-2510*

Photodiodes

In Situ Deep-Level Transient Spectroscopy and Dark Current Measurements of Proton-Irradiated InGaAs Photodiodes. *Nelson, G.T.*, +, *TNS Sept. 2020 2051-2061*

Comparison of X-Ray and Electron Radiation Effects on Dark Current Non-Uniformity and Fluctuations in CMOS Image Sensors. *Le Roch, A.*, +, *TNS Jan. 2020 268-277*

Displacement Damage Effects in InGaAs Photodiodes due to Electron, Proton, and Neutron Irradiations. *Nuns, T.*, +, *TNS July 2020 1263-1272*

High Displacement Damage Dose Effects in Radiation Hardened CMOS Image Sensors. *Rizzolo, S.*, +, *TNS July 2020 1256-1262*

New Approach for Pulsed-Laser Testing That Mimics Heavy-Ion Charge Deposition Profiles. *Hales, J.M.*, +, *TNS Jan. 2020 81-90*

Phosphorus Versus Arsenic: Role of the Photodiode Doping Element in CMOS Image Sensor Radiation-Induced Dark Current and Random Telegraph Signal. *Le Roch, A.*, +, *TNS July 2020 1241-1250*

Proton and Gamma Radiation Effects on a Fully Depleted Pinned Photodiode CMOS Image Sensor. *Meng, X.*, +, *TNS June 2020 1107-1113*

Response of Waveguide-Integrated Germanium-on-Silicon p-i-n Photodiodes to Neutron Displacement Damage. *Goley, P.S.*, +, *TNS Jan. 2020 296-304*

Technical Attenuation Length Measurement of Plastic Scintillator Strips for the Total-Body J-PET Scanner. *Kaplon, u.*, *TNS Oct. 2020 2286-2289*

Photoelectricity

Characterization of Uranium Ore Samples by HPGe Gamma-Ray Spectroscopy. *Marchais, T.*, +, *TNS April 2020 654-661*

Evolutions in Photoelectric Cross Section Calculations and Their Validation. *Basaglia, T.*, +, *TNS March 2020 492-501*

Photoemission

Photocurrent From Single Collision 14-MeV Neutrons in GaN and GaAs. *Jasica, M.J.*, +, *TNS Jan. 2020 221-227*

Photoluminescence

Band Gap Variation and Trap Distribution in Transparent Garnet Scintillator Ceramics. *Wieczorek, H.*, +, *TNS Aug. 2020 1934-1945*

Bulk Single Crystal Growth of W Co-Doped Ce:Gd₃Ga₃Al₂O₁₂ by Czochralski Method. *Ueno, M.*, +, *TNS June 2020 1045-1048*

Characterization of Silver-Doped LiF Crystal Grown by Czochralski Technique for Dark Matter Search Application. *Pandey, I.R.*, +, *TNS June 2020 915-921*

Composite Scintillators Based on the Films and Crystals of (Lu,Gd,La)₂Si₂O₇ Pyrosilicates. *Kurosawa, S.*, +, *TNS June 2020 994-998*

Crystal Growth and Scintillation Properties of Carbazole for Neutron Detection. *Yamaji, A.*, +, *TNS June 2020 1027-1031*

CsPbBr₃ Thin Films on LYSO:Ce Substrates. *Tomanova, K.*, +, *TNS June 2020 933-938*

Influence of Annealing Temperature on the Performance of Lu₂O₃:Eu³⁺ Nanowire Arrays Synthesized by Sol-Gel Method Using AAO Template. *Hu, Y.*, +, *TNS Aug. 2020 1899-1903*

Luminescence and Scintillation Properties of Mg²⁺-Codoped Lu_{0.6}Gd_{2.4}Al₂Ga₃O₁₂:Ce Single Crystal. *Chewpraditkul, W.*, +, *TNS June 2020 904-909*

Mechanism Analysis of Proton Irradiation-Induced Increase of 3-dB Bandwidth of GaN-Based Microlight-Emitting Diodes for Space Light Communication. *Wang, L.*, +, *TNS July 2020 1360-1364*

Optical Properties of InGaIn/GaN Multiple Quantum Well Structures Grown on GaN and Sapphire Substrates. *Jary, V.*, +, *TNS June 2020 974-977*

Remote Measurements of X-Rays Dose Rate Using a Cerium-Doped Air-Clad Optical Fiber. *Bahout, J.*, +, *TNS July 2020 1658-1662*

Role of Chemical Substitution in the Photoluminescence Properties of Cerium Samarium Tungstates Ce_(2-x)Sm_x(WO₄)₃ (0 ≤ x ≤ 0.3). *Derraji, K.*, +, *TNS April 2020 568-574*

Scintillation Characteristics of Mg²⁺-Codoped Y_{0.8}Gd_{2.2}(Al_{1-x}Ga_x)O₁₂:Ce Single Crystals. *Chewpraditkul, W.*, +, *TNS June 2020 910-914*

Scintillation Properties of β-Ga₂O₃ Single Crystal Excited by α-Ray. *He, N.*, +, *TNS Jan. 2020 400-404*

Scintillation Properties of Tetrafluoroaluminate Crystal. *Daniel, D.J.*, +, *TNS June 2020 898-903*

Stimulated Recovery of the Radiation Damage in Lead Tungstate Crystals. *Orsich, P.*, +, *TNS June 2020 952-955*

Transient and Steady-State Radiation Response of Phosphosilicate Optical Fibers: Influence of H₂ Loading. *Girard, S.*, +, *TNS Jan. 2020 289-295*

Ultrafast Radiative Relaxation Processes in Multication Cross-Luminescence Materials. *Saaring, J.*, +, *TNS June 2020 1009-1013*

Photomultipliers

⁶LiF:ZnS(Ag) Neutron Detector Performance Optimized Using Waveform Recordings and ROC Curves. *Pritchard, K.*, +, *TNS Jan. 2020 414-421*

A mm³ Fiber-Coupled Scintillator for In-Core Thermal Neutron Detection in CROCUS. *Vitulo, F.*, +, *TNS April 2020 625-635*

A Photomultiplier With an AlGaIn Photocathode and Microchannel Plates for BaF₂ Scintillator Detectors in Particle Physics. *Atanov, N.*, +, *TNS July 2020 1760-1764*

Advances in High-Resolution Ultrafast Lu₃:Ce Scintillators for Fast Timing Applications. *Marshall, M.S.J.*, +, *TNS June 2020 969-973*

Characterization of CLLBC Coupled to Silicon Photomultipliers. *Liang, F.*, +, *TNS June 2020 927-932*

Development of a 3-D Scintillator Detector for Compton Imaging Based on Laser Engraving. *Zhang, J.*, +, *TNS July 2020 1691-1698*

Development of a Gd₂Si₂O₇ (GPS) Scintillator-Based Alpha Imaging Detector for Rapid Plutonium Detection in High-Radon Environments. *Morishita, Y.*, +, *TNS Oct. 2020 2203-2208*

Development of Gamma-Ray Detector Arrays Consisting of Diced Eu-Doped SrI₂ Scintillator Arrays and TSV-MPPC Arrays. *Yoshino, M.*, +, *TNS June 2020 999-1002*

Front-End Electronics for the SiPM-Readout Gaseous TPC for Neutrinoless Double-Beta Decay Search. *Nakamura, K.Z.*, +, *TNS July 2020 1772-1776*

- Neutron Detection Module Based on Li-Glass Scintillator and Array of SiPMs. *Wengrowicz, U.*, +, *TNS April 2020 599-602*
- Neutron-Induced Radiation Damage in LYSO, BaF₂, and PWO Crystals. *Hu, C.*, +, *TNS June 2020 1086-1092*
- Onset of Fogging and Degradation in Polyvinyl Toluene-Based Scintillators. *Rose, P.B.*, +, *TNS July 2020 1765-1771*
- Optimization of the Charge Comparison Method for Multiradiation Field Using Various Measurement Systems. *Lynde, C.*, +, *TNS April 2020 679-687*
- Performance Evaluation of Liquinert-Processed CeBr₃ Crystals Coupled With a Multipixel Photon Counter. *Otaka, Y.*, +, *TNS June 2020 988-993*
- Performance of a Position-Sensitive Neutron Scintillation Detector Based on Silicon Photomultipliers. *Kumar, S.*, +, *TNS June 2020 1169-1174*
- Precision Timing in the CMS MTD Barrel Timing Layer With Crystal Bars and SiPMs. *Santanastasio, F.*, *TNS Sept. 2020 2105-2110*
- Reducing NaI(Tl) Detector Spectrum Shift by Optimizing Pulse Integration Time. *Wei, Q.*, +, *TNS Feb. 2020 450-454*
- Research and Verification on Real-Time Interpolated Timing Algorithm Based on Waveform Digitization. *Fan, Y.*, +, *TNS Oct. 2020 2246-2254*
- Scintillation Characteristics of Mg²⁺-Codoped Y_{0.8}Gd_{2.2}(Al_{s-x}Ga_x)O₁₂:Ce Single Crystals. *Chewpraditkul, W.*, +, *TNS June 2020 910-914*
- Sensitivity of Silicon Photomultipliers to Direct Gamma Ray Irradiation. *Lavelle, C.M.*, +, *TNS Jan. 2020 389-399*
- Study on Reactor Neutrino Directionality Search Utilizing Vertex Information Reconstructed by PMT Operating State in a Liquid Scintillator Detector. *Shin, C.D.*, +, *TNS Sept. 2020 1996-2002*
- The Mu2e e.m. Calorimeter: Crystals and SiPMs Production Status. *Atanov, N.*, +, *TNS June 2020 978-982*
- Time Resolution Measurements of EJ-232Q With Single- and Dual-Sided Readouts. *Wen, X.*, +, *TNS Sept. 2020 2081-2088*
- Tl₂ZrCl₆ and Tl₂HfCl₆ Intrinsic Scintillators for Gamma Rays and Fast Neutron Detection. *Bhattacharya, P.*, +, *TNS June 2020 1032-1034*
- Ultrafast Radiative Relaxation Processes in Multication Cross-Luminescence Materials. *Saaring, J.*, +, *TNS June 2020 1009-1013*
- Photon counting**
- Characterization of Silver-Doped LiF Crystal Grown by Czochralski Technique for Dark Matter Search Application. *Pandey, I.R.*, +, *TNS June 2020 915-921*
- DCR Performance in Neutron-Irradiated CMOS SPADs From 150- to 180-nm Technologies. *Ratti, L.*, +, *TNS July 2020 1293-1301*
- Development of Gamma-Ray Detector Arrays Consisting of Diced Eu-Doped SrI₂ Scintillator Arrays and TSV-MPPC Arrays. *Yoshino, M.*, +, *TNS June 2020 999-1002*
- Evaluation of an Operational Concept for Improving Radiation Tolerance of Single-Photon Avalanche Diode (SPAD) Arrays. *Smith, J.A.*, +, *TNS May 2020 797-804*
- Performance Evaluation of Liquinert-Processed CeBr₃ Crystals Coupled With a Multipixel Photon Counter. *Otaka, Y.*, +, *TNS June 2020 988-993*
- ROI-Wise Material Decomposition in Spectral Photon-Counting CT. *Xie, B.*, +, *TNS June 2020 1066-1075*
- Photonic band gap**
- Design of Electromagnetic Bandgap Cavities for High-Gradient On-Axis Coupled-Cavity Linear Accelerators. *Laneve, D.*, +, *TNS May 2020 768-776*
- Photonics**
- Reflectance of Silicon Photomultipliers at Vacuum Ultraviolet Wavelengths. *Ly, P.*, +, *TNS Dec. 2020 2501-2510*
- Simulation of High-Altitude Nuclear Electromagnetic Pulse Using a Modified Model of Scattered Gamma. *Li, Y.*, +, *TNS Dec. 2020 2474-2480*
- Special NSREC 2019 issue of the IEEE Transactions on Nuclear Science Editor Comments. *Fleetwood, D.*, +, *TNS Jan. 2020 7*
- Pions**
- The Pion Single-Event Effect Resonance and its Impact in an Accelerator Environment. *Coronetti, A.*, +, *TNS July 2020 1606-1613*
- Plasma diagnostics**
- Study of the Data Acquisition System for ITER Divertor Neutron Flux Monitor Diagnostic. *Fedorov, V.A.*, +, *TNS April 2020 688-693*
- Plasma toroidal confinement**
- Study of the Data Acquisition System for ITER Divertor Neutron Flux Monitor Diagnostic. *Fedorov, V.A.*, +, *TNS April 2020 688-693*
- Plasmas**
- Design and Analytical Evaluation of a New Ion Collection Geometry for Improvement in Quantity and Quality of Product During Laser Isotope Separation. *Dikshit, B.*, +, *TNS Dec. 2020 2465-2473*
- Plasmonics**
- Polarization Dependence of Pulsed Laser-Induced SEEs in SOI FinFETs. *Ryder, L.D.*, +, *TNS Jan. 2020 38-43*
- Plates (structures)**
- High-Temperature Measurements With a Fabry–Perot Extensometer. *Chey-mol, G.*, +, *TNS April 2020 552-558*
- Platinum**
- Effect of the Electric Field Strength on the Energy Resolution of Cr/CdTe/Pt Detectors. *Sklyarchuk, V.*, +, *TNS Nov. 2020 2439-2444*
- Plutonium**
- Development of a Gd₂Si₂O₇ (GPS) Scintillator-Based Alpha Imaging Detector for Rapid Plutonium Detection in High-Radon Environments. *Morishita, Y.*, +, *TNS Oct. 2020 2203-2208*
- Performance Assessment of Amplification and Discrimination Electronic Devices for Passive Neutron Measurements. *Ben Mosbah, M.*, +, *TNS April 2020 662-668*
- Point defects**
- Steady-State X-Ray Radiation-Induced Attenuation in Canonical Optical Fibers. *De Michele, V.*, +, *TNS July 2020 1650-1657*
- Transient and Steady-State Radiation Response of Phosphosilicate Optical Fibers: Influence of H₂ Loading. *Girard, S.*, +, *TNS Jan. 2020 289-295*
- Polymerization**
- X-Ray Detection Capabilities of Plastic Scintillators Incorporated With ZrO₂ Nanoparticles. *Toda, A.*, +, *TNS June 2020 983-987*
- Polymers**
- CdZnTe-Based X-Ray Spectrometer for Absolute Density Determination. *Zambelli, N.*, +, *TNS Oct. 2020 2273-2277*
- Study of Secondary Scattering/Albedo Neutron Fields and Their Impacts on SER as Function of Scene Topologies. *Hubert, G.*, +, *TNS Jan. 2020 201-209*
- Polynomials**
- Dose Measurements and Simulations of the RADFETs Response Onboard the Alphasat CTTB Experiments. *Sampaio, J.M.*, +, *TNS Sept. 2020 2028-2033*
- Portable instruments**
- Neutron Detection Module Based on Li-Glass Scintillator and Array of SiPMs. *Wengrowicz, U.*, +, *TNS April 2020 599-602*
- Position sensitive particle detectors**
- A 4-MHz, 256-Channel Readout ASIC for Column-Parallel CCDs With 78.7-dB Dynamic Range. *Grace, C.R.*, +, *TNS May 2020 823-831*
- A DAQ Upgrade Solution for Belle II Experiment. *Liu, Z.*, +, *TNS Aug. 2020 1904-1911*
- A Partial-Volume Correction for Quantitative Spectral X-Ray Radiography. *Gillis, W.C.*, +, *TNS Nov. 2020 2321-2328*
- A Photomultiplier With an AlGaN Photocathode and Microchannel Plates for BaF₂ Scintillator Detectors in Particle Physics. *Atanov, N.*, +, *TNS July 2020 1760-1764*
- Artifacts in High-Energy Compton Imaging With 3-D Position-Sensitive CdZnTe. *Shy, D.*, +, *TNS Aug. 2020 1920-1928*
- Design and Characterization of the CLICTD Pixelated Monolithic Sensor Chip. *Kremastiotis, I.*, +, *TNS Oct. 2020 2263-2272*
- Design and Experimental Validation of an Integrated Multichannel Charge Amplifier for Solid-State Detectors With Innovative Spectroscopic Range Booster. *Capra, S.*, +, *TNS Aug. 2020 1877-1884*
- Design and Testing of the Address in Real-Time Data Driver Card for the Micromegas Detector of the ATLAS New Small Wheel Upgrade. *Yao, L.*, +, *TNS Sept. 2020 2155-2160*
- Design Studies of High-Resolution Readout Planes Using Zigzags With GEM Detectors. *Azmoun, B.*, +, *TNS Aug. 2020 1869-1876*
- Development of a 3-D Scintillator Detector for Compton Imaging Based on Laser Engraving. *Zhang, J.*, +, *TNS July 2020 1691-1698*

Development of a Gd₂Si₂O₇ (GPS) Scintillator-Based Alpha Imaging Detector for Rapid Plutonium Detection in High-Radon Environments. *Morishita, Y.*, +, *TNS Oct. 2020 2203-2208*

Development of a High-Rate Front-End ASIC for X-Ray Spectroscopy and Diffraction Applications. *Vernon, E.*, +, *TNS April 2020 752-759*

Development of Gamma-Ray Detector Arrays Consisting of Diced Eu-Doped SrI₂ Scintillator Arrays and TSV-MPPC Arrays. *Yoshino, M.*, +, *TNS June 2020 999-1002*

Gas Scintillation Imager With Capillary Plate. *Sugiyama, H.*, +, *TNS June 2020 1035-1039*

Growth of Large-Area Cd_{0.9}Zn_{0.1}Te Single Crystals and Fabrication of Pixelated Guard-Ring Detector for Room-Temperature γ -Ray Detection. *Sajjad, M.*, +, *TNS Aug. 2020 1946-1951*

Hybrid Multipixel Array X-Ray Detectors for Real-Time Direct Detection of Hard X-Rays. *Thirimanne, H.M.*, +, *TNS Oct. 2020 2238-2245*

Performance of a Position-Sensitive Neutron Scintillation Detector Based on Silicon Photomultipliers. *Kumar, S.*, +, *TNS June 2020 1169-1174*

Phase I Upgrade of the Readout System of the Vertex Detector at the LHCb Experiment. *Fernandez Prieto, A.*, +, *TNS April 2020 732-739*

Precision Timing in the CMS MTD Barrel Timing Layer With Crystal Bars and SiPMs. *Santanastasio, F.*, *TNS Sept. 2020 2105-2110*

Progress on the Electromagnetic Calorimeter Trigger Simulation at the Belle II Experiment. *Lee, I.S.*, +, *TNS Sept. 2020 2143-2147*

Proton- and Neutron-Induced Single-Event Upsets in FPGAs for the PANDA Experiment. *Preston, M.*, +, *TNS June 2020 1093-1106*

Real Time Data Analysis With the ATLAS Trigger at the LHC in Run-2. *Beauchemin, P.*, *TNS Sept. 2020 2128-2135*

Shunt Regulator for the Serial Powering of the ATLAS CMOS Pixel Detector Modules. *Habib, A.*, +, *TNS Feb. 2020 455-463*

SLiT: A Strip-Sensor Readout Chip With Subnanosecond Time Walk for the J-PARC Muon $g - 2$ /EDM Experiment. *Kishishita, T.*, +, *TNS Sept. 2020 2089-2095*

Spatial Resolution of an Inorganic Crystal-Based Hard X-Ray Imager. *Hu, C.*, +, *TNS June 2020 1014-1019*

TERA: Throughput-Enhanced Readout ASIC for High-Rate Energy-Dispersive X-Ray Detection. *Hafizh, I.*, +, *TNS July 2020 1746-1759*

The Mu2e e.m. Calorimeter: Crystals and SiPMs Production Status. *Atanov, N.*, +, *TNS June 2020 978-982*

Time-Encoded Gamma-Ray Imaging Using a 3-D Position-Sensitive CdZnTe Detector Array. *Brown, S.T.*, +, *TNS Feb. 2020 464-472*

Timepix3 Luminosity Determination of 13-TeV Proton-Proton Collisions at the ATLAS Experiment. *Sopczak, A.*, *TNS April 2020 609-616*

Positron emission tomography

Band Gap Variation and Trap Distribution in Transparent Garnet Scintillator Ceramics. *Wieczorek, H.*, +, *TNS Aug. 2020 1934-1945*

Performance Evaluation of Liquinert-Processed CeBr₃ Crystals Coupled With a Multipixel Photon Counter. *Otaka, Y.*, +, *TNS June 2020 988-993*

Technical Attenuation Length Measurement of Plastic Scintillator Strips for the Total-Body J-PET Scanner. *Kaplon, u.*, *TNS Oct. 2020 2286-2289*

Time Resolution Measurements of EJ-232Q With Single- and Dual-Sided Readouts. *Wen, X.*, +, *TNS Sept. 2020 2081-2088*

Potassium compounds

Latest Progress on Advanced Bridgman Method-Grown K₂PtCl₆ Cubic Structure Scintillator Crystals. *Hawrami, R.*, +, *TNS June 2020 1020-1026*

Ultrafast Radiative Relaxation Processes in Multication Cross-Luminescence Materials. *Saaring, J.*, +, *TNS June 2020 1009-1013*

Power amplifiers

A 150-kW Pulse Solid-State Amplifier for Radio Frequency Quadrupole Application. *Jain, A.*, +, *TNS Nov. 2020 2303-2310*

Power bipolar transistors

A Study on Ionization Damage Effects of Anode-Short MOS-Controlled Thyristor. *Li, L.*, +, *TNS Sept. 2020 2062-2072*

Power control

Integral Sliding Mode for Power Distribution Control of Advanced Heavy Water Reactor. *Desai, R.J.*, +, *TNS June 2020 1076-1085*

Power converters

Analysis of SET Propagation in a System in Package Point of Load Converter. *Rajkowski, T.*, +, *TNS July 2020 1494-1502*

Power dividers

A 150-kW Pulse Solid-State Amplifier for Radio Frequency Quadrupole Application. *Jain, A.*, +, *TNS Nov. 2020 2303-2310*

Power engineering computing

Qualification of Hardware Description Language Designs for Safety Critical Applications in Nuclear Power Plants. *John, A.K.*, +, *TNS March 2020 502-507*

Power generation

Corrections to "Irradiation Tests of Optical Fibers and Cables Devoted to Corium Monitoring in Case of a Severe Accident in a Nuclear Power Plant". *Cheyamol, G.*, +, *TNS June 2020 1195*

Power MOSFET

A Study on Ionization Damage Effects of Anode-Short MOS-Controlled Thyristor. *Li, L.*, +, *TNS Sept. 2020 2062-2072*

Heavy-Ion Microbeam Studies of Single-Event Leakage Current Mechanism in SiC VD-MOSFETs. *Martinella, C.*, +, *TNS July 2020 1381-1389*

Impact of Electrical Stress and Neutron Irradiation on Reliability of Silicon Carbide Power MOSFET. *Niskanen, K.*, +, *TNS July 2020 1365-1373*

Inclusion of Radiation Environment Variability for Reliability Estimates for SiC Power MOSFETs. *Austin, R.A.*, +, *TNS Jan. 2020 353-357*

Ion-Induced Energy Pulse Mechanism for Single-Event Burnout in High-Voltage SiC Power MOSFETs and Junction Barrier Schottky Diodes. *Ball, D.R.*, +, *TNS Jan. 2020 22-28*

Single-Event Effects in Ground-Level Infrastructure During Extreme Ground-Level Enhancements. *Dyer, A.*, +, *TNS June 2020 1139-1143*

Power semiconductor diodes

Unifying Concepts for Ion-Induced Leakage Current Degradation in Silicon Carbide Schottky Power Diodes. *Johnson, R.A.*, +, *TNS Jan. 2020 135-139*

Power supply circuits

Shunt Regulator for the Serial Powering of the ATLAS CMOS Pixel Detector Modules. *Habib, A.*, +, *TNS Feb. 2020 455-463*

Power transistors

Total Dose Effects on Negative and Positive Low-Dropout Linear Regulators. *Privat, A.*, +, *TNS July 2020 1332-1338*

Preamplifiers

Design and Experimental Validation of an Integrated Multichannel Charge Amplifier for Solid-State Detectors With Innovative Spectroscopic Range Booster. *Capra, S.*, +, *TNS Aug. 2020 1877-1884*

Growth of Large-Area Cd_{0.9}Zn_{0.1}Te Single Crystals and Fabrication of Pixelated Guard-Ring Detector for Room-Temperature γ -Ray Detection. *Sajjad, M.*, +, *TNS Aug. 2020 1946-1951*

Hexagonal Pad Multichannel Ge X-Ray Spectroscopy Detector Demonstrator: Comprehensive Characterization. *Tartoni, N.*, +, *TNS Aug. 2020 1952-1961*

Impedance and Noise Closed-Form Model of Large-Area Integrated Resistors With High Stray Capacitance to be Used as Feedback Discharge Devices in Charge-Sensitive Preamplifiers for Nuclear Spectroscopy. *Capra, S.*, *TNS April 2020 722-731*

Performance Assessment of Amplification and Discrimination Electronic Devices for Passive Neutron Measurements. *Ben Mosbah, M.*, +, *TNS April 2020 662-668*

Performance of Perovskite CsPbBr₃ Single Crystal Detector for Gamma-Ray Detection. *Pan, L.*, +, *TNS Feb. 2020 443-449*

Precipitation (physical chemistry)

Role of Chemical Substitution in the Photoluminescence Properties of Cerium Samarium Tungstates Ce_(2-x)Sm_x(WO₄)₃ (0 ≤ x ≤ 0.3). *Derraji, K.*, +, *TNS April 2020 568-574*

Principal component analysis

Modeling Aerial Gamma-Ray Backgrounds Using Non-negative Matrix Factorization. *Bandstra, M.S.*, +, *TNS May 2020 777-790*

Printed circuit testing

Measured Energy-Dependent Neutron Attenuation Through the Stacked Printed Circuit Boards. *Wender, S.A.*, +, *TNS June 2020 1114-1117*

Method for System-Level Testing of COTS Electronic Board Under High-Energy Heavy Ions. *de Bibikoff, A.*, +, *TNS Oct. 2020 2179-2187*

Printed circuits

Radiation Effects on FR4 Printed Circuit Boards. *Scheuer, K.*, +, *TNS Aug. 2020 1846-1851*

Probability

Inherent Uncertainty in the Determination of Multiple Event Cross Sections in Radiation Tests. *Franco, F.J.*, +, *TNS July 2020 1547-1554*

Spin-Transfer Torque Magnetic Tunnel Junction for Single-Event Effects Mitigation in IC Design. *Coi, O.*, +, *TNS July 2020 1674-1681*

Program compilers

Applying Compiler-Automated Software Fault Tolerance to Multiple Processor Platforms. *James, B.*, +, *TNS Jan. 2020 321-327*

Proportional counters

Performance Assessment of Amplification and Discrimination Electronic Devices for Passive Neutron Measurements. *Ben Mosbah, M.*, +, *TNS April 2020 662-668*

Proteins

Luminescent Nanocomposites for Biomedical Applications. *Popovich, K.*, +, *TNS June 2020 962-968*

Protocols

Reliability Analysis of Ethernet-Based Solutions for Data Transmission in the CERN Radiation Environment. *Gnemmi, G.*, +, *TNS July 2020 1614-1622*

Proton accelerators

Design of Electromagnetic Bandgap Cavities for High-Gradient On-Axis Coupled-Cavity Linear Accelerators. *Laneve, D.*, +, *TNS May 2020 768-776*

Measurement of Single-Event Upsets in 65-nm SRAMs Under Irradiation of Spallation Neutrons at J-PARC MLF. *Kuroda, J.*, +, *TNS July 2020 1599-1605*

Proton beams

Design and Research of Magnetic Field Mapping System for SC200. *Chen, G.*, +, *TNS Jan. 2020 369-373*

Design of Electromagnetic Bandgap Cavities for High-Gradient On-Axis Coupled-Cavity Linear Accelerators. *Laneve, D.*, +, *TNS May 2020 768-776*

Simulation and Measurements of Collimator Effects in Proton and Neutron Radiation Testing for Single-Event Effects. *Belanger-Champagne, C.*, +, *TNS Jan. 2020 161-168*

Proton detection

A Proton Sensor for Energies From 2 to 20 MeV. *Ruffenach, M.*, +, *TNS July 2020 1351-1359*

Orbital Equivalence of Terrestrial Radiation Tolerance Experiments. *Logan, J.V.*, +, *TNS Nov. 2020 2382-2391*

Proton effects

In Situ Deep-Level Transient Spectroscopy and Dark Current Measurements of Proton-Irradiated InGaAs Photodiodes. *Nelson, G.T.*, +, *TNS Sept. 2020 2051-2061*

A Chip-Level Single-Event Latchup (SEL) Estimation Methodology. *Neale, A.*, +, *TNS Jan. 2020 15-21*

A Survey of the Analytical Methods of Proton-NIEL Calculations in Silicon and Germanium. *Akkerman, A.*, +, *TNS Aug. 2020 1813-1825*

Comparison of X-Ray and Proton Irradiation Effects on the Characteristics of InGaN/GaN Multiple Quantum Wells Light-Emitting Diodes. *Wang, L.*, +, *TNS July 2020 1345-1350*

COTS Optocoupler Radiation Qualification Process for LHC Applications Based on Mixed-Field Irradiations. *Ferraro, R.*, +, *TNS July 2020 1395-1403*

Displacement Damage Effects in InGaAs Photodiodes due to Electron, Proton, and Neutron Irradiations. *Nuns, T.*, +, *TNS July 2020 1263-1272*

Evaluation of a COTS 65-nm SRAM Under 15 MeV Protons and 14 MeV Neutrons at Low VDD. *Rezaei, M.*, +, *TNS Oct. 2020 2188-2195*

High-Fluence Proton-Induced Degradation on AlGaIn/GaN High-Electron-Mobility Transistors. *Yue, S.*, +, *TNS July 2020 1339-1344*

Low-Energy Protons—Where and Why “Rare Events” Matter. *Rodbell, K.P.*, *TNS July 2020 1204-1215*

Mechanism Analysis of Proton Irradiation-Induced Increase of 3-dB Bandwidth of GaN-Based Microlight-Emitting Diodes for Space Light Communication. *Wang, L.*, +, *TNS July 2020 1360-1364*

New SEU Modeling Method for Calibrating Target System to Multiple Radiation Particles. *Caron, P.*, +, *TNS Jan. 2020 44-49*

Phosphorus Versus Arsenic: Role of the Photodiode Doping Element in CMOS Image Sensor Radiation-Induced Dark Current and Random Telegraph Signal. *Le Roch, A.*, +, *TNS July 2020 1241-1250*

Proton and Gamma Radiation Effects on a Fully Depleted Pinned Photodiode CMOS Image Sensor. *Meng, X.*, +, *TNS June 2020 1107-1113*

Sensitivity of Silicon Photomultipliers to Direct Gamma Ray Irradiation. *Lavelle, C.M.*, +, *TNS Jan. 2020 389-399*

Single Event Effect Testing With Ultrahigh Energy Heavy Ion Beams. *Kas-triotou, M.*, +, *TNS Jan. 2020 63-70*

Study of the Deposited Energy Spectra in Silicon by High-Energy Neutron and Mixed Fields. *Cazzaniga, C.*, +, *TNS Jan. 2020 175-180*

The Use of Microprocessor Trace Infrastructures for Radiation-Induced Fault Diagnosis. *Pena-Fernandez, M.*, +, *TNS Jan. 2020 126-134*

Proton-proton inclusive interactions

Timepix3 Luminosity Determination of 13-TeV Proton-Proton Collisions at the ATLAS Experiment. *Sopczak, A.*, *TNS April 2020 609-616*

Protons

Electron, Neutron, and Proton Irradiation Effects on SiC Radiation Detectors. *Rafi, J.M.*, +, *TNS Dec. 2020 2481-2489*

Prototypes

Fabrication and First Characterization of Silicon-Based Full 3-D Microdosimeters. *Kok, A.*, +, *TNS Dec. 2020 2490-2500*

Pulse height analyzers

A Configurable Configuration for an Environmental Radiation Monitoring System. *Hung, D.T.*, +, *TNS Oct. 2020 2224-2230*

Pulse shaping

A Method to Restrain Parameter Drift in Trapezoidal Pulse Shaping. *Wen-gang, S.*, +, *TNS July 2020 1710-1714*

Pile-Up Correction in Spectroscopic Signals Using Regularized Sparse Reconstruction. *Kafaei, M.*, +, *TNS May 2020 858-862*

Q**Q factor**

Continuous Wave Operation of Superconducting Accelerating Cavities With High Loaded Quality Factor. *Cichalewski, W.*, +, *TNS Sept. 2020 2119-2127*

Quantum computing

Scalable Self-Adaptive Synchronous Triggering System in Superconducting Quantum Computing. *Sun, L.*, +, *TNS Sept. 2020 2148-2154*

Quantum well devices

Comparison of X-Ray and Proton Irradiation Effects on the Characteristics of InGaN/GaN Multiple Quantum Wells Light-Emitting Diodes. *Wang, L.*, +, *TNS July 2020 1345-1350*

Mechanism Analysis of Proton Irradiation-Induced Increase of 3-dB Bandwidth of GaN-Based Microlight-Emitting Diodes for Space Light Communication. *Wang, L.*, +, *TNS July 2020 1360-1364*

Quenching (thermal)

Band Gap Variation and Trap Distribution in Transparent Garnet Scintillator Ceramics. *Wieczorek, H.*, +, *TNS Aug. 2020 1934-1945*

R**Radar imaging**

Proximity-Based Sensor Fusion of Depth Cameras and Isotropic Rad-Detectors. *Henderson, K.*, +, *TNS May 2020 840-857*

Radiation belts

A Proton Sensor for Energies From 2 to 20 MeV. *Ruffenach, M.*, +, *TNS July 2020 1351-1359*

Analysis of the Drift of the South Atlantic Anomaly From ICARE and SEM-2 Flight Data. *Aubry, M.*, +, *TNS July 2020 1251-1255*

Charging Monitor Aboard the Geostationary Satellite GK2A at 128.2° E Longitude. *Woo, J.*, +, *TNS April 2020 740-745*

Radiation detection

Generation of Synthetic Data for a Radiation Detection Algorithm Competition. *Nicholson, A.D.*, +, *TNS Aug. 2020 1968-1975*

Radiation detectors

Electron, Neutron, and Proton Irradiation Effects on SiC Radiation Detectors. *Rafi, J.M.*, +, *TNS Dec. 2020 2481-2489*

Radiation effects

- A Special Total-Ionizing-Dose-Induced Short Channel Effect in Thin-Film PDSOI Technology: Phenomena, Analyses, and Models. *Bi, D.*, +, *TNS Nov. 2020 2337-2344*
- A Survey of the Analytical Methods of Proton-NIEL Calculations in Silicon and Germanium. *Akkerman, A.*, +, *TNS Aug. 2020 1813-1825*
- Combined Temperature and Radiation Effects on Radiation-Sensitive Single-Mode Optical Fibers. *Campanella, C.*, +, *TNS July 2020 1643-1649*
- Corrections to "Irradiation Tests of Optical Fibers and Cables Devoted to Corium Monitoring in Case of a Severe Accident in a Nuclear Power Plant". *Cheyamol, G.*, +, *TNS June 2020 1195*
- Design-of-Experiments and Monte-Carlo Methods in Upset Rate-Calculations. *Hansen, D.L.*, *TNS Jan. 2020 336-344*
- Electron, Neutron, and Proton Irradiation Effects on SiC Radiation Detectors. *Rafti, J.M.*, +, *TNS Dec. 2020 2481-2489*
- Estimation of Residual Radioactivity and Radiation Damage in SiC After Neutron Irradiation. *Lee, K.*, +, *TNS July 2020 1374-1380*
- Evolution of Ionization-Induced Defects in GLPNP Bipolar Transistors at Different Temperatures. *Dong, L.*, +, *TNS Sept. 2020 2003-2008*
- Experimental and Analytical Study of the Responses of Nanoscale Devices to Neutrons Impinging at Various Incident Angles. *Korkian, G.*, +, *TNS Nov. 2020 2345-2352*
- Improving the Geiger Muller Counter Characteristics by Optimizing the Anode and Cathode Radius Dimensions. *Arbutina, D.*, +, *TNS Oct. 2020 2231-2237*
- Neutron-Induced Radiation Damage in LYSO, BaF₂, and PWO Crystals. *Hu, C.*, +, *TNS June 2020 1086-1092*
- Radiation Environment in the LHC Arc Sections During Run 2 and Future HL-LHC Operations. *Bilko, K.*, +, *TNS July 2020 1682-1690*
- Risk Methodology for SEE Caused by Proton- Induced Fission of High-Z Materials in Microelectronic Packaging. *Ladbury, R.*, *TNS June 2020 1152-1160*
- Special NSREC 2019 issue of the IEEE Transactions on Nuclear Science Editor Comments. *Fleetwood, D.*, +, *TNS Jan. 2020 7*
- Steady-State X-Ray Radiation-Induced Attenuation in Canonical Optical Fibers. *De Michele, V.*, +, *TNS July 2020 1650-1657*
- Stimulated Recovery of the Radiation Damage in Lead Tungstate Crystals. *Orsich, P.*, +, *TNS June 2020 952-955*
- The Pion Single-Event Effect Resonance and its Impact in an Accelerator Environment. *Coronetti, A.*, +, *TNS July 2020 1606-1613*
- Total-Ionizing-Dose Effects and Low-Frequency Noise in 30-nm Gate-Length Bulk and SOI FinFETs With SiO₂/HfO₂ Gate Dielectrics. *Gorchichko, M.*, +, *TNS Jan. 2020 245-252*

Radiation hardening

- Performances of Radiation-Hardened Single-Ended Raman Distributed Temperature Sensors Using Commercially Available Fibers. *Morana, A.*, +, *TNS Jan. 2020 305-311*
- Radiation Effects on WDM and DWDM Architectures of Preamplifier and Boost-Amplifier. *Aubry, M.*, +, *TNS Jan. 2020 278-283*

Radiation hardening (electronics)

- A 3-D Simulation-Based Approach to Analyze Heavy Ions-Induced SET on Digital Circuits. *Sterpone, L.*, +, *TNS Sept. 2020 2034-2041*
- A Chip-Level Single-Event Latchup (SEL) Estimation Methodology. *Neale, A.*, +, *TNS Jan. 2020 15-21*
- A Radiation-Hardened CMOS Image Sensor With Pixels Exhibiting a Negligibly Small Dark-Level Increase During Ionizing Radiation. *Watanabe, T.*, +, *TNS Aug. 2020 1835-1845*
- A Radiation-Hardened Dual-Direction SCR Based on LDMOS for ESD Protection in the Extreme Radiation Environment. *Wu, M.*, +, *TNS April 2020 708-715*
- A Radiation-Tolerant, Multigigabit Serial Link Based on FPGAs. *Giordano, R.*, +, *TNS Aug. 2020 1852-1860*
- A Statistical Method for MCU Extraction Without the Physical-to-Logical Address Mapping. *Wang, X.*, +, *TNS July 2020 1443-1451*
- A Study on Ionization Damage Effects of Anode-Short MOS-Controlled Thyristor. *Li, L.*, +, *TNS Sept. 2020 2062-2072*

- Analysis of SET Propagation in a System in Package Point of Load Converter. *Rajkowski, T.*, +, *TNS July 2020 1494-1502*
- Angular Sensitivity of Neutron-Induced Single-Event Upsets in 12-nm Fin-FET SRAMs With Comparison to 20-nm Planar SRAMs. *Kato, T.*, +, *TNS July 2020 1485-1493*
- Annealing Effects on Radiation-Hardened CMOS Image Sensors Exposed to Ultrahigh Total Ionizing Doses. *Dewitte, H.*, +, *TNS July 2020 1284-1292*
- Applying Compiler-Automated Software Fault Tolerance to Multiple Processor Platforms. *James, B.*, +, *TNS Jan. 2020 321-327*
- Assessment of On-Chip Current Sensor for Detection of Thermal-Neutron-Induced Transients. *Possamai Bastos, R.*, +, *TNS July 2020 1404-1411*
- Atmospheric Neutron Radiation Response of III-V Binary Compound Semiconductors. *Autran, J.*, +, *TNS July 2020 1428-1435*
- Comparison of Sensitive Volumes Associated With Ion- and Laser-Induced Charge Collection in an Epitaxial Silicon Diode. *Ryder, K.L.*, +, *TNS Jan. 2020 57-62*
- Comparison of Single-Event Transients in SiGe HBTs on Bulk and Thick-Film SOI. *Ildefonso, A.*, +, *TNS Jan. 2020 71-80*
- Comparison of X-Ray and Electron Radiation Effects on Dark Current Non-Uniformity and Fluctuations in CMOS Image Sensors. *Le Roch, A.*, +, *TNS Jan. 2020 268-277*
- COTS Optocoupler Radiation Qualification Process for LHC Applications Based on Mixed-Field Irradiations. *Ferraro, R.*, +, *TNS July 2020 1395-1403*
- Data-Retention-Voltage-Based Analysis of Systematic Variations in SRAM SEU Hardness: A Possible Solution to Synergistic Effects of TID. *Kobayashi, D.*, +, *TNS Jan. 2020 328-335*
- Design and Characterizations of the Radiation-Hardened XCR4C ASIC for X-Ray CCDs for Space Astronomical Applications. *Lu, B.*, +, *TNS June 2020 1175-1184*
- DFF Layout Variations in CMOS SOI—Analysis of Hardening by Design Options. *Black, J.D.*, +, *TNS June 2020 1125-1132*
- Direct Ionization Impact on Accelerator Mixed-Field Soft-Error Rate. *Alia, R.G.*, +, *TNS Jan. 2020 345-352*
- Dose Measurements and Simulations of the RADFETs Response Onboard the Alphasat CTTB Experiments. *Sampaio, J.M.*, +, *TNS Sept. 2020 2028-2033*
- Electronic-to-Photonic Single-Event Transient Propagation in a Segmented Mach-Zehnder Modulator in a Si/SiGe Integrated Photonics Platform. *Tzintzarov, G.N.*, +, *TNS Jan. 2020 260-267*
- Empirical Mathematical Model of Microprocessor Sensitivity and Early Prediction to Proton and Neutron Radiation-Induced Soft Errors. *Serrano-Cases, A.*, +, *TNS July 2020 1511-1520*
- Error Detection and Mitigation of Data-Intensive Microprocessor Applications Using SIMD and Trace Monitoring. *Pena-Fernandez, M.*, +, *TNS July 2020 1452-1460*
- Evaluating Soft Core RISC-V Processor in SRAM-Based FPGA Under Radiation Effects. *de Oliveira, A.B.*, +, *TNS July 2020 1503-1510*
- Evaluation of a COTS 65-nm SRAM Under 15 MeV Protons and 14 MeV Neutrons at Low VDD. *Rezaei, M.*, +, *TNS Oct. 2020 2188-2195*
- Evaluation of Soft-Error Tolerance by Neutrons and Heavy Ions on Flip Flops With Guard Gates in a 65-nm Thin BOX FDSOI Process. *Ebara, M.*, +, *TNS July 2020 1470-1477*
- Exploiting Transistor Folding Layout as RHBD Technique Against Single-Event Transients. *Aguiar, Y.Q.*, +, *TNS July 2020 1581-1589*
- High Displacement Damage Dose Effects in Radiation Hardened CMOS Image Sensors. *Rizzolo, S.*, +, *TNS July 2020 1256-1262*
- Impact of the Angle of Incidence on Negative Muon-Induced SEU Cross Sections of 65-nm Bulk and FDSOI SRAMs. *Liao, W.*, +, *TNS July 2020 1566-1572*
- Improving the Reliability of TMR With Nontriplicated I/O on SRAM FPGAs. *Cannon, M.J.*, +, *TNS Jan. 2020 312-320*
- Inclusion of Radiation Environment Variability for Reliability Estimates for SiC Power MOSFETs. *Austin, R.A.*, +, *TNS Jan. 2020 353-357*
- Inherent Uncertainty in the Determination of Multiple Event Cross Sections in Radiation Tests. *Franco, F.J.*, +, *TNS July 2020 1547-1554*

- Intercomparison of Ionizing Doses From Space Shielding Analyses Using MCNP, Geant4, FASTRAD, and NOVICE. *Jun, B., +, TNS July 2020 1629-1636*
- Ion-Induced Energy Pulse Mechanism for Single-Event Burnout in High-Voltage SiC Power MOSFETs and Junction Barrier Schottky Diodes. *Ball, D.R., +, TNS Jan. 2020 22-28*
- Ionizing Radiation Effects Spectroscopy for Analysis of Single-Event Transients. *Loveless, T.D., +, TNS Jan. 2020 99-107*
- Ionizing-Radiation Response and Low-Frequency Noise of 28-nm MOSFETs at Ultrahigh Doses. *Bonaldo, S., +, TNS July 2020 1302-1311*
- Low-Energy Protons—Where and Why “Rare Events” Matter. *Rodbell, K.P., TNS July 2020 1204-1215*
- Measured Energy-Dependent Neutron Attenuation Through the Stacked Printed Circuit Boards. *Wender, S.A., +, TNS June 2020 1114-1117*
- Measurement of Single-Event Upsets in 65-nm SRAMs Under Irradiation of Spallation Neutrons at J-PARC MLF. *Kuroda, J., +, TNS July 2020 1599-1605*
- Method for System-Level Testing of COTS Electronic Board Under High-Energy Heavy Ions. *de Bibikoff, A., +, TNS Oct. 2020 2179-2187*
- Modeling of Near Zero-Field Magnetoresistance and Electrically Detected Magnetic Resonance in Irradiated Si/SiO₂ MOSFETs. *Harmon, N.J., +, TNS July 2020 1669-1673*
- Multiple Layout-Hardening Comparison of SEU-Mitigated Filp-Flops in 22-nm UTBB FD-SOI Technology. *Cai, C., +, TNS Jan. 2020 374-381*
- New SEU Modeling Method for Calibrating Target System to Multiple Radiation Particles. *Caron, P., +, TNS Jan. 2020 44-49*
- Polarization Dependence of Pulsed Laser-Induced SEEs in SOI FinFETs. *Ryder, L.D., +, TNS Jan. 2020 38-43*
- Radiation Hardened by Design Subsampling Phase-Locked Loop Techniques in PD-SOI. *Richards, E.W., +, TNS June 2020 1144-1151*
- Radiation-Hardened Sensor Interface Circuit for Monitoring Severe Accidents in Nuclear Power Plants. *Jeon, H., +, TNS July 2020 1738-1745*
- Radiation-Induced Variable Retention Time in Dynamic Random Access Memories. *Goiffon, V., +, TNS Jan. 2020 234-244*
- Reducing Soft Error Rate of SoCs Analog-to-Digital Interfaces With Design Diversity Redundancy. *Gonzalez, C.J., +, TNS March 2020 518-524*
- Risk Methodology for SEE Caused by Proton-Induced Fission of High-Z Materials in Microelectronic Packaging. *Ladbury, R., TNS June 2020 1152-1160*
- SE Response of Guard-Gate FF in 16- and 7-nm Bulk FinFET Technologies. *Cao, J., +, TNS July 2020 1436-1442*
- Sensitive-Volume Model of Single-Event Latchup for a 180-nm SRAM Test Structure. *Wang, P., +, TNS Sept. 2020 2015-2020*
- Single Event Effect Testing With Ultrahigh Energy Heavy Ion Beams. *Kastriotou, M., +, TNS Jan. 2020 63-70*
- Single Event Upsets Under 14-MeV Neutrons in a 28-nm SRAM-Based FPGA in Static Mode. *Fabero, J.C., +, TNS July 2020 1461-1469*
- Single-Event Effects Characterization of LC-VCO PLLs in a 28-nm CMOS Technology. *Zhang, Z., +, TNS Sept. 2020 2042-2050*
- Single-Event Effects in Ground-Level Infrastructure During Extreme Ground-Level Enhancements. *Dyer, A., +, TNS June 2020 1139-1143*
- Single-Event Effects in Pinned Photodiode CMOS Image Sensors: SET and SEL. *Cai, Y., +, TNS Aug. 2020 1861-1868*
- Single-Event Transients in SiGe HBTs Induced by Pulsed X-Ray Microbeam. *Nergui, D., +, TNS Jan. 2020 91-98*
- Single-Event Upset Responses of Metal-Oxide-Metal Capacitors and Diodes Used in Bulk 65-nm CMOS Analog Circuits. *Xu, R., +, TNS April 2020 698-707*
- Single-Event Upset Tolerance Study of a Low-Voltage 13T Radiation-Hardened SRAM Bitcell. *Haran, A., +, TNS Aug. 2020 1803-1812*
- Special NSREC 2019 issue of the IEEE Transactions on Nuclear Science Editor Comments. *Fleetwood, D., +, TNS Jan. 2020 7*
- Spin-Transfer Torque Magnetic Tunnel Junction for Single-Event Effects Mitigation in IC Design. *Coi, O., +, TNS July 2020 1674-1681*
- Statistical Method to Extract Radiation-Induced Multiple-Cell Upsets in SRAM-Based FPGAs. *Perez-Celis, A., +, TNS Jan. 2020 50-56*
- Study of Secondary Scattering/Albedo Neutron Fields and Their Impacts on SER as Function of Scene Topologies. *Hubert, G., +, TNS Jan. 2020 201-209*
- Temperature-Compensated MOS Dosimeter Fully Integrated in a High-Voltage 0.35 μm CMOS Process. *Carbonetto, S., +, TNS June 2020 1118-1124*
- The Pion Single-Event Effect Resonance and its Impact in an Accelerator Environment. *Coronetti, A., +, TNS July 2020 1606-1613*
- The Use of Microprocessor Trace Infrastructures for Radiation-Induced Fault Diagnosis. *Pena-Fernandez, M., +, TNS Jan. 2020 126-134*
- Thermal Neutron-Induced SEUs in the LHC Accelerator Environment. *Cecchetto, M., +, TNS July 2020 1412-1420*
- TID Response of Bulk Si PMOS FinFETs: Bias, Fin Width, and Orientation Dependence. *Ren, Z., +, TNS July 2020 1320-1325*
- TID Response of Nanowire Field-Effect Transistors: Impact of the Back-Gate Bias. *Riffaud, J., +, TNS Oct. 2020 2172-2178*
- TID-Induced OFF-State Leakage Current in Partially Radiation-Hardened SOI LDMOS. *Shu, L., +, TNS June 2020 1133-1138*
- Total Dose Effects on Negative and Positive Low-Dropout Linear Regulators. *Privat, A., +, TNS July 2020 1332-1338*
- Total Ionizing Dose Effects in 30-V Split-Gate Trench VDMOS. *Wang, R., +, TNS Sept. 2020 2009-2014*
- Total-Ionizing-Dose Effects and Low-Frequency Noise in 16-nm InGaAs FinFETs With HfO₂/Al₂O₃ Dielectrics. *Bonaldo, S., +, TNS Jan. 2020 210-220*
- Total-Ionizing-Dose Effects in InGaAs MOSFETs With High-*k* Gate Dielectrics and InP Substrates. *Bonaldo, S., +, TNS July 2020 1312-1319*
- Tradeoffs Between RF Performance and SET Robustness in Low-Noise Amplifiers in a Complementary SiGe BiCMOS Platform. *Ildefonso, A., +, TNS July 2020 1521-1529*
- Transistor Width Effect on the Power Supply Voltage Dependence of α -SER in CMOS 6T SRAM. *Torrens, G., +, TNS May 2020 811-817*
- Understanding the Impact of Quantization, Accuracy, and Radiation on the Reliability of Convolutional Neural Networks on FPGAs. *Libano, F., +, TNS July 2020 1478-1484*
- Understanding the Key Parameter Dependences Influencing the Soft-Error Susceptibility of Standard Combinational Logic. *Pande, N., +, TNS Jan. 2020 116-125*
- Wavelet Analysis of RTS Noise in CMOS Image Sensors Irradiated With High-Energy Photons. *Hendrickson, B., +, TNS July 2020 1732-1737*
- Radiation monitoring**
- A Confident Configuration for an Environmental Radiation Monitoring System. *Hung, D.T., +, TNS Oct. 2020 2224-2230*
- A Proton Sensor for Energies From 2 to 20 MeV. *Ruffenach, M., +, TNS July 2020 1351-1359*
- Advances in High-Resolution Ultrafast Lu₃:Ce Scintillators for Fast Timing Applications. *Marshall, M.S.J., +, TNS June 2020 969-973*
- Determination of Uranium Enrichment Using a Plastic Scintillator. *Kim, Y., +, TNS April 2020 592-598*
- Evaluation of Low Dose Silicon Carbide Temperature Monitors. *Davis, K.L., +, TNS April 2020 585-591*
- Growth and Scintillation Properties of a New Red-Emitting Scintillator Rb₂HfF₆ for the Fiber-Reading Radiation Monitor. *Kodama, S., +, TNS June 2020 1055-1062*
- Performance of High Stopping Power Bismuth-Loaded Plastic Scintillators for Radiation Portal Monitors. *O'Neal, S., +, TNS April 2020 746-751*
- Unmanned Radiation-Monitoring System. *Cerba, S., +, TNS April 2020 636-643*
- Radiation protection**
- Unmanned Radiation-Monitoring System. *Cerba, S., +, TNS April 2020 636-643*
- Radiation quenching**
- Role of Chemical Substitution in the Photoluminescence Properties of Cerium Samarium Tungstates Ce_(2-x)Sm_x(WO₄)₃ (0 \leq *x* \leq 0.3). *Derraji, K., +, TNS April 2020 568-574*
- Radiation therapy**
- Design and Research of Magnetic Field Mapping System for SC200. *Chen, G., +, TNS Jan. 2020 369-373*

Gamma-Heating and Gamma Flux Measurements in the JSI TRIGA Reactor: Results and Prospects. *Gruel, A.*, +, *TNS April 2020 559-567*

On the Combined Effect of Silicon Oxide Thickness and Boron Implantation Under the Gate in MOSFET Dosimeters. *Biasi, G.*, +, *TNS March 2020 534-540*

Remote Measurements of X-Rays Dose Rate Using a Cerium-Doped Air-Clad Optical Fiber. *Bahout, J.*, +, *TNS July 2020 1658-1662*

Simulation and Measurements of Collimator Effects in Proton and Neutron Radiation Testing for Single-Event Effects. *Belanger-Champagne, C.*, +, *TNS Jan. 2020 161-168*

Ultralow Power Ionizing Dose Sensor Based on Complementary Fully Depleted MOS Transistors for Radiotherapy Application. *Alcalde Bessia, F.*, +, *TNS Oct. 2020 2217-2223*

Radio frequency

Displacement Damage Effects Mitigation Approach for Heterojunction Bipolar Transistor Frequency Synthesizers. *Sotskov, D.I.*, +, *TNS Nov. 2020 2396-2404*

Radioactive pollution

Unmanned Radiation-Monitoring System. *Cerba, S.*, +, *TNS April 2020 636-643*

Radioactive sources

Analysis of Source Detectability With Fast-Moving Sensors. *Miller, J.K.*, +, *TNS Oct. 2020 2278-2285*

Artifacts in High-Energy Compton Imaging With 3-D Position-Sensitive CdZnTe. *Shy, D.*, +, *TNS Aug. 2020 1920-1928*

Hexagonal Pad Multichannel Ge X-Ray Spectroscopy Detector Demonstrator: Comprehensive Characterization. *Tartoni, N.*, +, *TNS Aug. 2020 1952-1961*

Pile-Up Correction in Spectroscopic Signals Using Regularized Sparse Reconstruction. *Kafae, M.*, +, *TNS May 2020 858-862*

Proximity-Based Sensor Fusion of Depth Cameras and Isotropic Rad-Detectors. *Henderson, K.*, +, *TNS May 2020 840-857*

Reconstructing the Position and Intensity of Multiple Gamma-Ray Point Sources With a Sparse Parametric Algorithm. *Vavrek, J.R.*, +, *TNS Nov. 2020 2421-2430*

Radioactive waste

Performance Assessment of Amplification and Discrimination Electronic Devices for Passive Neutron Measurements. *Ben Mosbah, M.*, +, *TNS April 2020 662-668*

Radioactive waste processing

Determination of Uranium Enrichment Using a Plastic Scintillator. *Kim, Y.*, +, *TNS April 2020 592-598*

Radioactive waste storage

Boron-Coated Straws Imaging Panel Capability for Passive and Active Neutron Measurements of Radioactive Waste Drums. *Eleon, C.*, +, *TNS Sept. 2020 2096-2104*

Collimator-Less Passive Gamma Scanning for Radioactive Waste Drums. *Vax, E.*, +, *TNS April 2020 544-551*

High-Resolution Gamma Spectrometry of a Plutonium Bearing Waste Drum With High-Energy Reaction-Induced Gamma Rays. *Bottau, V.*, +, *TNS April 2020 575-584*

Radioactivity measurement

Characterization of Uranium Ore Samples by HPGe Gamma-Ray Spectroscopy. *Marchais, T.*, +, *TNS April 2020 654-661*

Radiofrequency interference

Least Mean Squares Filters Suppressing the Radio-Frequency Interference in AERA Cosmic Ray Radio Detection. *Szadkowski, Z.*, *TNS Jan. 2020 405-413*

Radiography

A Partial-Volume Correction for Quantitative Spectral X-Ray Radiography. *Gillis, W.C.*, +, *TNS Nov. 2020 2321-2328*

Gas Scintillation Imager With Capillary Plate. *Sugiyama, H.*, +, *TNS June 2020 1035-1039*

Simulated X-Ray Radiographic Performance of a Bismuth-Loaded PVT Array. *Decker, A.W.*, +, *TNS Nov. 2020 2329-2336*

Radioisotopes

Automatic and Real-Time Identification of Radionuclides in Gamma-Ray Spectra: A New Method Based on Convolutional Neural Network Trained With Synthetic Data Set. *Daniel, G.*, +, *TNS April 2020 644-653*

Characterization of Uranium Ore Samples by HPGe Gamma-Ray Spectroscopy. *Marchais, T.*, +, *TNS April 2020 654-661*

Estimation of Residual Radioactivity and Radiation Damage in SiC After Neutron Irradiation. *Lee, K.*, +, *TNS July 2020 1374-1380*

Monte Carlo Calculations of the Detection Efficiency of Composite Scintillator Arrays for Fast and Moderated Neutrons, and for Gamma-Ray Spectroscopy. *Derenzo, S.E.*, +, *TNS June 2020 888-893*

Radiology

Generation of Synthetic Data for a Radiation Detection Algorithm Competition. *Nicholson, A.D.*, +, *TNS Aug. 2020 1968-1975*

Unmanned Radiation-Monitoring System. *Cerba, S.*, +, *TNS April 2020 636-643*

Radiolysis

Irradiation Tests of Optical Fibers and Cables Devoted to Corium Monitoring in Case of a Severe Accident in a Nuclear Power Plant. *Cheymol, G.*, +, *TNS April 2020 669-678*

Radon

Development of a Gd₂Si₂O₇ (GPS) Scintillator-Based Alpha Imaging Detector for Rapid Plutonium Detection in High-Radon Environments. *Morishita, Y.*, +, *TNS Oct. 2020 2203-2208*

Raman spectra

Performances of Radiation-Hardened Single-Ended Raman Distributed Temperature Sensors Using Commercially Available Fibers. *Morana, A.*, +, *TNS Jan. 2020 305-311*

Random access memory

Energy-Resolved Soft-Error Rate Measurements for 1–800 MeV Neutrons by the Time-of-Flight Technique at LANSCE. *Iwashita, H.*, +, *TNS Nov. 2020 2363-2369*

Experimental and Analytical Study of the Responses of Nanoscale Devices to Neutrons Impinging at Various Incident Angles. *Korkian, G.*, +, *TNS Nov. 2020 2345-2352*

Failure Analysis of Galaxy S7 Edge Smartphone Using Neutron Radiation. *Bak, G.*, +, *TNS Nov. 2020 2370-2381*

Random noise

Total-Ionizing-Dose Effects and Low-Frequency Noise in 30-nm Gate-Length Bulk and SOI FinFETs With SiO₂/HfO₂ Gate Dielectrics. *Gorchichko, M.*, +, *TNS Jan. 2020 245-252*

Ray tracing

Intercomparison of Ionizing Doses From Space Shielding Analyses Using MCNP, Geant4, FASTRAD, and NOVICE. *Jun, B.*, +, *TNS July 2020 1629-1636*

Reactivity (fission reactors)

Cascaded HTGR Power-Level Control Only by Regulating Primary Helium Flow Rate. *Dong, Z.*, +, *TNS Aug. 2020 1780-1790*

Integral Sliding Mode for Power Distribution Control of Advanced Heavy Water Reactor. *Desai, R.J.*, +, *TNS June 2020 1076-1085*

Readout electronics

A 4-MHz, 256-Channel Readout ASIC for Column-Parallel CCDs With 78.7-dB Dynamic Range. *Grace, C.R.*, +, *TNS May 2020 823-831*

A DAQ Upgrade Solution for Belle II Experiment. *Liu, Z.*, +, *TNS Aug. 2020 1904-1911*

A mm³ Fiber-Coupled Scintillator for In-Core Thermal Neutron Detection in CROCUS. *Vitulo, F.*, +, *TNS April 2020 625-635*

Annealing Effects on Radiation-Hardened CMOS Image Sensors Exposed to Ultrahigh Total Ionizing Doses. *Dewitte, H.*, +, *TNS July 2020 1284-1292*

Clock-Centric Serial Links for the Synchronization of Distributed Readout Systems. *Calvet, D.*, *TNS Aug. 2020 1912-1919*

Design and Characterization of the CLICTD Pixelated Monolithic Sensor Chip. *Kremastiotis, I.*, +, *TNS Oct. 2020 2263-2272*

Design and Characterizations of the Radiation-Hardened XCR4C ASIC for X-Ray CCDs for Space Astronomical Applications. *Lu, B.*, +, *TNS June 2020 1175-1184*

- Design and Experimental Validation of an Integrated Multichannel Charge Amplifier for Solid-State Detectors With Innovative Spectroscopic Range Booster. *Capra, S., +, TNS Aug. 2020 1877-1884*
- Design and Performance of Data Acquisition and Control System for the Muon g-2 Laser Calibration. *Mastroianni, S., +, TNS May 2020 832-839*
- Design Studies of High-Resolution Readout Planes Using Zigzags With GEM Detectors. *Azmoun, B., +, TNS Aug. 2020 1869-1876*
- Front-End Electronics for the SiPM-Readout Gaseous TPC for Neutrinoless Double-Beta Decay Search. *Nakamura, K.Z., +, TNS July 2020 1772-1776*
- Hexagonal Pad Multichannel Ge X-Ray Spectroscopy Detector Demonstrator: Comprehensive Characterization. *Tartoni, N., +, TNS Aug. 2020 1952-1961*
- Performance Evaluation of Liquinert-Processed CeBr₃ Crystals Coupled With a Multipixel Photon Counter. *Otaka, Y., +, TNS June 2020 988-993*
- Phase I Upgrade of the Readout System of the Vertex Detector at the LHCb Experiment. *Fernandez Prieto, A., +, TNS April 2020 732-739*
- Precision Timing in the CMS MTD Barrel Timing Layer With Crystal Bars and SiPMs. *Santanastasio, F., TNS Sept. 2020 2105-2110*
- Slit: A Strip-Sensor Readout Chip With Subnanosecond Time Walk for the J-PARC Muon g - 2/EDM Experiment. *Kishishita, T., +, TNS Sept. 2020 2089-2095*
- TERA: Throughput-Enhanced Readout ASIC for High-Rate Energy-Dispersive X-Ray Detection. *Hafizh, I., +, TNS July 2020 1746-1759*
- The Mu2e e.m. Calorimeter: Crystals and SiPMs Production Status. *Atanov, N., +, TNS June 2020 978-982*
- Time Resolution Measurements of EJ-232Q With Single- and Dual-Sided Readouts. *Wen, X., +, TNS Sept. 2020 2081-2088*
- Timepix3 Luminosity Determination of 13-TeV Proton-Proton Collisions at the ATLAS Experiment. *Sopczak, A., TNS April 2020 609-616*
- Rectification**
- Effect of the Electric Field Strength on the Energy Resolution of Cr/CdTe/Pt Detectors. *Sklyarchuk, V., +, TNS Nov. 2020 2439-2444*
- Reduced instruction set computing**
- Empirical Mathematical Model of Microprocessor Sensitivity and Early Prediction to Proton and Neutron Radiation-Induced Soft Errors. *Serrano-Cases, A., +, TNS July 2020 1511-1520*
- Evaluating Soft Core RISC-V Processor in SRAM-Based FPGA Under Radiation Effects. *de Oliveira, A.B., +, TNS July 2020 1503-1510*
- Redundancy**
- Applying Compiler-Automated Software Fault Tolerance to Multiple Processor Platforms. *James, B., +, TNS Jan. 2020 321-327*
- Evaluating Soft Core RISC-V Processor in SRAM-Based FPGA Under Radiation Effects. *de Oliveira, A.B., +, TNS July 2020 1503-1510*
- Improving the Reliability of TMR With Nontriplicated I/O on SRAM FPGAs. *Cannon, M.J., +, TNS Jan. 2020 312-320*
- Reducing Soft Error Rate of SoCs Analog-to-Digital Interfaces With Design Diversity Redundancy. *Gonzalez, C.J., +, TNS March 2020 518-524*
- Reed-Solomon codes**
- A Radiation-Tolerant, Multigigabit Serial Link Based on FPGAs. *Giordano, R., +, TNS Aug. 2020 1852-1860*
- Reference circuits**
- Analysis of SET Propagation in a System in Package Point of Load Converter. *Rajkowski, T., +, TNS July 2020 1494-1502*
- Cryogenic Bandgap Reference Circuit With Compact Model Parameter Extraction of MOSFETs and BJTs for HPGe Detectors. *Liu, F., +, TNS Oct. 2020 2209-2216*
- Total Dose Effects on Negative and Positive Low-Dropout Linear Regulators. *Privat, A., +, TNS July 2020 1332-1338*
- Registers**
- Energy-Resolved Soft-Error Rate Measurements for 1–800 MeV Neutrons by the Time-of-Flight Technique at LANSCE. *Iwashita, H., +, TNS Nov. 2020 2363-2369*
- Remote sensing**
- Analysis of the Drift of the South Atlantic Anomaly From ICARE and SEM-2 Flight Data. *Aubry, M., +, TNS July 2020 1251-1255*
- Charging Monitor Aboard the Geostationary Satellite GK2A at 128.2° E Longitude. *Woo, J., +, TNS April 2020 740-745*
- Remote sensing by radar**
- How Much Do Solar Cycle Variations Impact Long-Term Effect Predictions at LEO?. *Bourdarie, S., +, TNS Oct. 2020 2196-2202*
- Resins**
- Radiation Effects on FR4 Printed Circuit Boards. *Scheuer, K., +, TNS Aug. 2020 1846-1851*
- Resistors**
- Impedance and Noise Closed-Form Model of Large-Area Integrated Resistors With High Stray Capacitance to be Used as Feedback Discharge Devices in Charge-Sensitive Preamplifiers for Nuclear Spectroscopy. *Capra, S., TNS April 2020 722-731*
- Rhodium**
- Nuclear Heating Measurements by Gamma and Neutron Thermometers. *Van Nieuwenhove, R., +, TNS Sept. 2020 2073-2080*
- Risk management**
- In Situ Gas Monitoring by Fiber-Coupled Raman Spectrometry for H₂-Risk Management in Nuclear Containment During a Severe Nuclear Accident. *Magne, S., +, TNS April 2020 617-624*
- Rockets**
- Evaluating Soft Core RISC-V Processor in SRAM-Based FPGA Under Radiation Effects. *de Oliveira, A.B., +, TNS July 2020 1503-1510*
- Rubidium compounds**
- Scintillation Properties of Tetrafluoroaluminate Crystal. *Daniel, D.J., +, TNS June 2020 898-903*
- S**
- Safety-critical software**
- Qualification of Hardware Description Language Designs for Safety Critical Applications in Nuclear Power Plants. *John, A.K., +, TNS March 2020 502-507*
- Samarium compounds**
- Role of Chemical Substitution in the Photoluminescence Properties of Cerium Samarium Tungstates Ce_(2-x)Sm_x(WO₄)₃ (0 ≤ x ≤ 0.3). *Derraji, K., +, TNS April 2020 568-574*
- Satellite navigation**
- An Update to MOBE-DIC Using Current Monitor Measurements From Galileo. *Hands, A.D.P., +, TNS Jan. 2020 181-190*
- Scanning electron microscopy**
- Role of Chemical Substitution in the Photoluminescence Properties of Cerium Samarium Tungstates Ce_(2-x)Sm_x(WO₄)₃ (0 ≤ x ≤ 0.3). *Derraji, K., +, TNS April 2020 568-574*
- Scattering**
- Development of a Position-Sensitive 4π Compton Camera Based on a Single Segmented Scintillator. *Lee, H., +, TNS Dec. 2020 2511-2522*
- Simulation of High-Altitude Nuclear Electromagnetic Pulse Using a Modified Model of Scattered Gamma. *Li, Y., +, TNS Dec. 2020 2474-2480*
- Schottky barriers**
- Ion-Induced Energy Pulse Mechanism for Single-Event Burnout in High-Voltage SiC Power MOSFETs and Junction Barrier Schottky Diodes. *Ball, D.R., +, TNS Jan. 2020 22-28*
- Schottky diodes**
- Electron, Neutron, and Proton Irradiation Effects on SiC Radiation Detectors. *Rafi, J.M., +, TNS Dec. 2020 2481-2489*
- Ion-Induced Energy Pulse Mechanism for Single-Event Burnout in High-Voltage SiC Power MOSFETs and Junction Barrier Schottky Diodes. *Ball, D.R., +, TNS Jan. 2020 22-28*
- Unifying Concepts for Ion-Induced Leakage Current Degradation in Silicon Carbide Schottky Power Diodes. *Johnson, R.A., +, TNS Jan. 2020 135-139*
- Scintillation**
- Bulk Single Crystal Growth of W Co-Doped Ce:Gd₃Ga₃Al₂O₁₂ by Czochralski Method. *Ueno, M., +, TNS June 2020 1045-1048*
- Characterization of Silver-Doped LiF Crystal Grown by Czochralski Technique for Dark Matter Search Application. *Pandey, I.R., +, TNS June 2020 915-921*
- Crystal Growth and Scintillation Properties of Carbazole for Neutron Detection. *Yamaji, A., +, TNS June 2020 1027-1031*
- CsPbBr₃ Thin Films on LYSO:Ce Substrates. *Tomanova, K., +, TNS June 2020 933-938*

Development of Gamma-Ray Detector Arrays Consisting of Diced Eu-Doped SrI₂ Scintillator Arrays and TSV-MPPC Arrays. *Yoshino, M.*, +, *TNS June 2020 999-1002*

High-Resolution Thermal Neutron Imaging With ¹⁰Boron/CsI:Tl Scintillator Screen. *Miller, S.R.*, +, *TNS Aug. 2020 1929-1933*

Luminescence and Scintillation Properties of Mg²⁺-Codoped Lu_{0.6}Gd_{2.4}Al₂Ga₃O₁₂:Ce Single Crystal. *Chewpraditkul, W.*, +, *TNS June 2020 904-909*

Onset of Fogging and Degradation in Polyvinyl Toluene-Based Scintillators. *Rose, P.B.*, +, *TNS July 2020 1765-1771*

Optical and Scintillation Properties of Hf³⁺ Codoped SrI₂:Eu²⁺ Single Crystals. *Wang, S.*, +, *TNS June 2020 876-879*

Optical Properties of InGaN/GaN Multiple Quantum Well Structures Grown on GaN and Sapphire Substrates. *Jary, V.*, +, *TNS June 2020 974-977*

Scintillation Characteristics of Mg²⁺-Codoped Y_{0.8}Gd_{2.2}(Al_{1-x}Ga_x)O₁₂:Ce Single Crystals. *Chewpraditkul, W.*, +, *TNS June 2020 910-914*

Scintillation Properties of Tetrafluoroaluminate Crystal. *Daniel, D.J.*, +, *TNS June 2020 898-903*

Study on the Time Response of a Barium Fluoride Scintillation Detector for Fast Pulse Radiation Detection. *Chen, X.*, +, *TNS Aug. 2020 1893-1898*

Tl₂ZrCl₆ and Tl₂HfCl₆ Intrinsic Scintillators for Gamma Rays and Fast Neutron Detection. *Bhattacharya, P.*, +, *TNS June 2020 1032-1034*

Ultrafast Radiative Relaxation Processes in Multication Cross-Luminescence Materials. *Saaring, J.*, +, *TNS June 2020 1009-1013*

X-Ray Detection Capabilities of Plastic Scintillators Incorporated With ZrO₂ Nanoparticles. *Toda, A.*, +, *TNS June 2020 983-987*

Scintillation counters

A mm³ Fiber-Coupled Scintillator for In-Core Thermal Neutron Detection in CROCUS. *Vitulo, F.*, +, *TNS April 2020 625-635*

Band Gap Variation and Trap Distribution in Transparent Garnet Scintillator Ceramics. *Wieczorek, H.*, +, *TNS Aug. 2020 1934-1945*

Characterization of CLLBC Coupled to Silicon Photomultipliers. *Liang, F.*, +, *TNS June 2020 927-932*

Colloidal Quantum Dot-Doped Optical Fibers for Scintillation Dosimetry. *Whittaker, C.*, +, *TNS June 2020 1040-1044*

Composite Scintillators Based on the Films and Crystals of (Lu,Gd,La)-₂Si₂O₇ Pyrosilicates. *Kurosawa, S.*, +, *TNS June 2020 994-998*

Detector Upgrade for Fast MeV X-Ray Imaging for Severe Accidents Experiments. *Tisseur, D.*, +, *TNS July 2020 1715-1721*

Gas Scintillation Imager With Capillary Plate. *Sugiyama, H.*, +, *TNS June 2020 1035-1039*

High-Resolution Thermal Neutron Imaging With ¹⁰Boron/CsI:Tl Scintillator Screen. *Miller, S.R.*, +, *TNS Aug. 2020 1929-1933*

Luminescence and Scintillation Properties of Mg²⁺-Codoped Lu_{0.6}Gd_{2.4}Al₂Ga₃O₁₂:Ce Single Crystal. *Chewpraditkul, W.*, +, *TNS June 2020 904-909*

Monte Carlo Calculations of the Detection Efficiency of Composite Scintillator Arrays for Fast and Moderated Neutrons, and for Gamma-Ray Spectroscopy. *Derenzo, S.E.*, +, *TNS June 2020 888-893*

Neutron Detection Module Based on Li-Glass Scintillator and Array of SiPMs. *Wengrowicz, U.*, +, *TNS April 2020 599-602*

Optimization of the Charge Comparison Method for Multiradiation Field Using Various Measurement Systems. *Lynde, C.*, +, *TNS April 2020 679-687*

Response of the BGO Calorimeter to Cosmic-Ray Nuclei in the DAMPE Experiment on Orbit. *Dai, H.T.*, +, *TNS June 2020 956-961*

Scintillation Characteristics of Mg²⁺-Codoped Y_{0.8}Gd_{2.2}(Al_{1-x}Ga_x)O₁₂:Ce Single Crystals. *Chewpraditkul, W.*, +, *TNS June 2020 910-914*

Sensitivity of Silicon Photomultipliers to Direct Gamma Ray Irradiation. *Lavelle, C.M.*, +, *TNS Jan. 2020 389-399*

Silver-Doped LiI Crystal: A Sensitive Thermal Neutron Detector With Pulse Shape Discrimination. *Vuong, P.Q.*, +, *TNS Oct. 2020 2290-2294*

Stimulated Recovery of the Radiation Damage in Lead Tungstate Crystals. *Orsich, P.*, +, *TNS June 2020 952-955*

Study of the Deposited Energy Spectra in Silicon by High-Energy Neutron and Mixed Fields. *Cazzaniga, C.*, +, *TNS Jan. 2020 175-180*

Study on the Time Response of a Barium Fluoride Scintillation Detector for Fast Pulse Radiation Detection. *Chen, X.*, +, *TNS Aug. 2020 1893-1898*

Thermal Characterization of Tl₂LiYCl₆:Ce (TLYC). *Watts, M.M.*, +, *TNS March 2020 525-533*

Tl₂ZrCl₆ and Tl₂HfCl₆ Intrinsic Scintillators for Gamma Rays and Fast Neutron Detection. *Bhattacharya, P.*, +, *TNS June 2020 1032-1034*

Ultrafast Radiative Relaxation Processes in Multication Cross-Luminescence Materials. *Saaring, J.*, +, *TNS June 2020 1009-1013*

Scintillators

Development of a Position-Sensitive 4π Compton Camera Based on a Single Segmented Scintillator. *Lee, H.*, +, *TNS Dec. 2020 2511-2522*

Segregation

Bulk Single Crystal Growth of W Co-Doped Ce:Gd₃Ga₅Al₂O₁₂ by Czochralski Method. *Ueno, M.*, +, *TNS June 2020 1045-1048*

Selenium

Effects of High-Dose X-Ray Irradiation on the Hole Lifetime in Vacuum-Deposited Stabilized a-Se Photoconductive Films: Implications to the Quality Control of a-Se Used in X-Ray Detectors. *Simonson, B.*, +, *TNS Nov. 2020 2445-2453*

Semiconductor counters

A Confident Configuration for an Environmental Radiation Monitoring System. *Hung, D.T.*, +, *TNS Oct. 2020 2224-2230*

A mm³ Fiber-Coupled Scintillator for In-Core Thermal Neutron Detection in CROCUS. *Vitulo, F.*, +, *TNS April 2020 625-635*

Artifacts in High-Energy Compton Imaging With 3-D Position-Sensitive CdZnTe. *Shy, D.*, +, *TNS Aug. 2020 1920-1928*

Automatic and Real-Time Identification of Radionuclides in Gamma-Ray Spectra: A New Method Based on Convolutional Neural Network Trained With Synthetic Data Set. *Daniel, G.*, +, *TNS April 2020 644-653*

Comparison Between Silicon Carbide and Diamond for Thermal Neutron Detection at Room Temperature. *Obraztsova, O.*, +, *TNS May 2020 863-871*

Comparison of Zr, Bi, Ti, and Ga as Metal Contacts in Inorganic Perovskite CsPbBr₃ Gamma-Ray Detector. *Pan, L.*, +, *TNS Oct. 2020 2255-2262*

Cryogenic Bandgap Reference Circuit With Compact Model Parameter Extraction of MOSFETs and BJTs for HPGe Detectors. *Liu, F.*, +, *TNS Oct. 2020 2209-2216*

Design and Characterization of the CLICTD Pixelated Monolithic Sensor Chip. *Kremastiotis, I.*, +, *TNS Oct. 2020 2263-2272*

Development of a 3-D Scintillator Detector for Compton Imaging Based on Laser Engraving. *Zhang, J.*, +, *TNS July 2020 1691-1698*

Effect of the Electric Field Strength on the Energy Resolution of Cr/CdTe/Pt Detectors. *Sklyarchuk, V.*, +, *TNS Nov. 2020 2439-2444*

Growth of Large-Area Cd_{0.9}Zn_{0.1}Te Single Crystals and Fabrication of Pixelated Guard-Ring Detector for Room-Temperature γ-Ray Detection. *Sajjad, M.*, +, *TNS Aug. 2020 1946-1951*

Performance of Perovskite CsPbBr₃ Single Crystal Detector for Gamma-Ray Detection. *Pan, L.*, +, *TNS Feb. 2020 443-449*

Time-Encoded Gamma-Ray Imaging Using a 3-D Position-Sensitive CdZnTe Detector Array. *Brown, S.T.*, +, *TNS Feb. 2020 464-472*

Semiconductor device breakdown

A Study on Ionization Damage Effects of Anode-Short MOS-Controlled Thyristor. *Li, L.*, +, *TNS Sept. 2020 2062-2072*

Impact of Electrical Stress and Neutron Irradiation on Reliability of Silicon Carbide Power MOSFET. *Niskanen, K.*, +, *TNS July 2020 1365-1373*

Ion-Induced Energy Pulse Mechanism for Single-Event Burnout in High-Voltage SiC Power MOSFETs and Junction Barrier Schottky Diodes. *Ball, D.R.*, +, *TNS Jan. 2020 22-28*

TID-Induced Breakdown Voltage Degradation in Uniform and Linear Variable Doping SOI p-LDMOSFETs. *Shu, L.*, +, *TNS July 2020 1390-1394*

Total Ionizing Dose Effects in 30-V Split-Gate Trench VDMOS. *Wang, R.*, +, *TNS Sept. 2020 2009-2014*

Semiconductor device measurement

Comparison of X-Ray and Proton Irradiation Effects on the Characteristics of InGaN/GaN Multiple Quantum Wells Light-Emitting Diodes. *Wang, L.*, +, *TNS July 2020 1345-1350*

Energy-Resolved Soft-Error Rate Measurements for 1–800 MeV Neutrons by the Time-of-Flight Technique at LANSCE. *Iwashita, H.*, +, *TNS Nov. 2020 2363-2369*

- Ionizing-Radiation Response and Low-Frequency Noise of 28-nm MOS-FETs at Ultrahigh Doses. *Bonaldo, S.*, +, *TNS July 2020 1302-1311*
- Polarization Dependence of Pulsed Laser-Induced SEEs in SOI FinFETs. *Ryder, L.D.*, +, *TNS Jan. 2020 38-43*
- Total-Ionizing-Dose Effects and Low-Frequency Noise in 16-nm InGaAs FinFETs With $\text{HfO}_2/\text{Al}_2\text{O}_3$ Dielectrics. *Bonaldo, S.*, +, *TNS Jan. 2020 210-220*
- Total-Ionizing-Dose Effects, Border Traps, and $1/f$ Noise in Emerging MOS Technologies. *Fleetwood, D.M.*, *TNS July 2020 1216-1240*
- Semiconductor device models**
- Comparison of Single-Event Transients in SiGe HBTs on Bulk and Thick-Film SOI. *Ildefonso, A.*, +, *TNS Jan. 2020 71-80*
- Cryogenic Bandgap Reference Circuit With Compact Model Parameter Extraction of MOSFETs and BJTs for HPGc Detectors. *Liu, F.*, +, *TNS Oct. 2020 2209-2216*
- DFF Layout Variations in CMOS SOI—Analysis of Hardening by Design Options. *Black, J.D.*, +, *TNS June 2020 1125-1132*
- Dose Measurements and Simulations of the RADFETs Response Onboard the Alphasat CTTB Experiments. *Sampaio, J.M.*, +, *TNS Sept. 2020 2028-2033*
- Experimental Study on Displacement Damage Effects of Anode-Short MOS-Controlled Thyristor. *Li, L.*, +, *TNS March 2020 508-517*
- Impact of Electrical Stress and Neutron Irradiation on Reliability of Silicon Carbide Power MOSFET. *Niskanen, K.*, +, *TNS July 2020 1365-1373*
- Modeling of Near Zero-Field Magnetoresistance and Electrically Detected Magnetic Resonance in Irradiated Si/SiO₂ MOSFETs. *Harmon, N.J.*, +, *TNS July 2020 1669-1673*
- Single-Event Transients in SiGe HBTs Induced by Pulsed X-Ray Microbeam. *Nergui, D.*, +, *TNS Jan. 2020 91-98*
- Total Ionizing Dose Effects in 30-V Split-Gate Trench VDMOS. *Wang, R.*, +, *TNS Sept. 2020 2009-2014*
- Total-Ionizing-Dose Effects, Border Traps, and $1/f$ Noise in Emerging MOS Technologies. *Fleetwood, D.M.*, *TNS July 2020 1216-1240*
- Semiconductor device noise**
- High-Fluence Proton-Induced Degradation on AlGaIn/GaN High-Electron-Mobility Transistors. *Yue, S.*, +, *TNS July 2020 1339-1344*
- Total-Ionizing-Dose Effects and Low-Frequency Noise in 16-nm InGaAs FinFETs With $\text{HfO}_2/\text{Al}_2\text{O}_3$ Dielectrics. *Bonaldo, S.*, +, *TNS Jan. 2020 210-220*
- Semiconductor device reliability**
- Impact of Electrical Stress and Neutron Irradiation on Reliability of Silicon Carbide Power MOSFET. *Niskanen, K.*, +, *TNS July 2020 1365-1373*
- Inclusion of Radiation Environment Variability for Reliability Estimates for SiC Power MOSFETs. *Austin, R.A.*, +, *TNS Jan. 2020 353-357*
- Total-Ionizing-Dose Effects, Border Traps, and $1/f$ Noise in Emerging MOS Technologies. *Fleetwood, D.M.*, *TNS July 2020 1216-1240*
- Semiconductor device testing**
- A Radiation-Hardened Dual-Direction SCR Based on LDMOS for ESD Protection in the Extreme Radiation Environment. *Wu, M.*, +, *TNS April 2020 708-715*
- Comparison of Single-Event Transients in SiGe HBTs on Bulk and Thick-Film SOI. *Ildefonso, A.*, +, *TNS Jan. 2020 71-80*
- Polarization Dependence of Pulsed Laser-Induced SEEs in SOI FinFETs. *Ryder, L.D.*, +, *TNS Jan. 2020 38-43*
- Semiconductor devices**
- Energy-Resolved Soft-Error Rate Measurements for 1–800 MeV Neutrons by the Time-of-Flight Technique at LANSCE. *Iwashita, H.*, +, *TNS Nov. 2020 2363-2369*
- Semiconductor diodes**
- In Situ* Deep-Level Transient Spectroscopy and Dark Current Measurements of Proton-Irradiated InGaAs Photodiodes. *Nelson, G.T.*, +, *TNS Sept. 2020 2051-2061*
- Comparison Between Silicon Carbide and Diamond for Thermal Neutron Detection at Room Temperature. *Obraztsova, O.*, +, *TNS May 2020 863-871*
- Comparison of Sensitive Volumes Associated With Ion- and Laser-Induced Charge Collection in an Epitaxial Silicon Diode. *Ryder, K.L.*, +, *TNS Jan. 2020 57-62*
- Polarization Dependence of Pulsed Laser-Induced SEEs in SOI FinFETs. *Ryder, L.D.*, +, *TNS Jan. 2020 38-43*
- Single-Event Upset Responses of Metal–Oxide–Metal Capacitors and Diodes Used in Bulk 65-nm CMOS Analog Circuits. *Xu, R.*, +, *TNS April 2020 698-707*
- Semiconductor doping**
- Comparison of Sensitive Volumes Associated With Ion- and Laser-Induced Charge Collection in an Epitaxial Silicon Diode. *Ryder, K.L.*, +, *TNS Jan. 2020 57-62*
- Phosphorus Versus Arsenic: Role of the Photodiode Doping Element in CMOS Image Sensor Radiation-Induced Dark Current and Random Telegraph Signal. *Le Roch, A.*, +, *TNS July 2020 1241-1250*
- Semiconductor epitaxial layers**
- Design and Characterizations of the Radiation-Hardened XCR4C ASIC for X-Ray CCDs for Space Astronomical Applications. *Lu, B.*, +, *TNS June 2020 1175-1184*
- Mechanism Analysis of Proton Irradiation-Induced Increase of 3-dB Bandwidth of GaN-Based Microlight-Emitting Diodes for Space Light Communication. *Wang, L.*, +, *TNS July 2020 1360-1364*
- Optical Properties of InGaIn/GaN Multiple Quantum Well Structures Grown on GaN and Sapphire Substrates. *Jary, V.*, +, *TNS June 2020 974-977*
- Semiconductor growth**
- Mechanism Analysis of Proton Irradiation-Induced Increase of 3-dB Bandwidth of GaN-Based Microlight-Emitting Diodes for Space Light Communication. *Wang, L.*, +, *TNS July 2020 1360-1364*
- Optical Properties of InGaIn/GaN Multiple Quantum Well Structures Grown on GaN and Sapphire Substrates. *Jary, V.*, +, *TNS June 2020 974-977*
- Scintillation Properties of β -Ga₂O₃ Single Crystal Excited by α -Ray. *He, N.*, +, *TNS Jan. 2020 400-404*
- Semiconductor lasers**
- Stimulated Recovery of the Radiation Damage in Lead Tungstate Crystals. *Orsich, P.*, +, *TNS June 2020 952-955*
- Semiconductor materials**
- CdZnTe-Based X-Ray Spectrometer for Absolute Density Determination. *Zambelli, N.*, +, *TNS Oct. 2020 2273-2277*
- Semiconductor quantum dots**
- Colloidal Quantum Dot-Doped Optical Fibers for Scintillation Dosimetry. *Whittaker, C.*, +, *TNS June 2020 1040-1044*
- Semiconductor quantum wells**
- Comparison of X-Ray and Proton Irradiation Effects on the Characteristics of InGaIn/GaN Multiple Quantum Wells Light-Emitting Diodes. *Wang, L.*, +, *TNS July 2020 1345-1350*
- Mechanism Analysis of Proton Irradiation-Induced Increase of 3-dB Bandwidth of GaN-Based Microlight-Emitting Diodes for Space Light Communication. *Wang, L.*, +, *TNS July 2020 1360-1364*
- Optical Properties of InGaIn/GaN Multiple Quantum Well Structures Grown on GaN and Sapphire Substrates. *Jary, V.*, +, *TNS June 2020 974-977*
- Semiconductor thin films**
- Effects of High-Dose X-Ray Irradiation on the Hole Lifetime in Vacuum-Deposited Stabilized a-Se Photoconductive Films: Implications to the Quality Control of a-Se Used in X-Ray Detectors. *Simonson, B.*, +, *TNS Nov. 2020 2445-2453*
- Observation of Radiation-Induced Leakage Current Defects in MOS Oxides With Multifrequency Electrically Detected Magnetic Resonance and Near-Zero-Field Magnetoresistance. *Moxim, S.J.*, +, *TNS Jan. 2020 228-233*
- Sensitivity**
- Experimental and Analytical Study of the Responses of Nanoscale Devices to Neutrons Impinging at Various Incident Angles. *Korkian, G.*, +, *TNS Nov. 2020 2345-2352*
- Sensor placement**
- Gamma-Ray Source Detection Under Occlusions and Position Errors in Cluttered Urban Scenes. *Miller, K.*, +, *TNS June 2020 1185-1194*
- Shielding**
- Orbital Equivalence of Terrestrial Radiation Tolerance Experiments. *Logan, J.V.*, +, *TNS Nov. 2020 2382-2391*
- Simulation and Measurements of Collimator Effects in Proton and Neutron Radiation Testing for Single-Event Effects. *Belanger-Champagne, C.*, +, *TNS Jan. 2020 161-168*

Shot noise

High Displacement Damage Dose Effects in Radiation Hardened CMOS Image Sensors. *Rizzolo, S.*, +, *TNS July 2020 1256-1262*

Sigma-delta modulation

A 4-MHz, 256-Channel Readout ASIC for Column-Parallel CCDs With 78.7-dB Dynamic Range. *Grace, C.R.*, +, *TNS May 2020 823-831*

Signal processing

A Method to Restrain Parameter Drift in Trapezoidal Pulse Shaping. *Wengang, S.*, +, *TNS July 2020 1710-1714*

Pile-Up Correction in Spectroscopic Signals Using Regularized Sparse Reconstruction. *Kafae, M.*, +, *TNS May 2020 858-862*

Signal reconstruction

Wavelet Analysis of RTS Noise in CMOS Image Sensors Irradiated With High-Energy Photons. *Hendrickson, B.*, +, *TNS July 2020 1732-1737*

Silicon

A Survey of the Analytical Methods of Proton-NIEL Calculations in Silicon and Germanium. *Akkerman, A.*, +, *TNS Aug. 2020 1813-1825*

Comparison of Back-Thinned Detector Ultraviolet Quantum Efficiency for Two Commercially Available Passivation Treatments. *Heymes, J.*, +, *TNS Aug. 2020 1962-1967*

Comparison of Sensitive Volumes Associated With Ion- and Laser-Induced Charge Collection in an Epitaxial Silicon Diode. *Ryder, K.L.*, +, *TNS Jan. 2020 57-62*

Comparison of X-Ray and Proton Irradiation Effects on the Characteristics of InGaN/GaN Multiple Quantum Wells Light-Emitting Diodes. *Wang, L.*, +, *TNS July 2020 1345-1350*

Design and Characterization of the CLICTD Pixelated Monolithic Sensor Chip. *Kremastiotis, I.*, +, *TNS Oct. 2020 2263-2272*

Design and Characterizations of the Radiation-Hardened XCR4C ASIC for X-Ray CCDs for Space Astronomical Applications. *Lu, B.*, +, *TNS June 2020 1175-1184*

Detector Upgrade for Fast MeV X-Ray Imaging for Severe Accidents Experiments. *Tisseur, D.*, +, *TNS July 2020 1715-1721*

Dose Measurements and Simulations of the RADFETs Response Onboard the Alphasat CTTB Experiments. *Sampaio, J.M.*, +, *TNS Sept. 2020 2028-2033*

Electronic-to-Photonic Single-Event Transient Propagation in a Segmented Mach-Zehnder Modulator in a Si/SiGe Integrated Photonics Platform. *Tzintzarov, G.N.*, +, *TNS Jan. 2020 260-267*

Evaluation of an Operational Concept for Improving Radiation Tolerance of Single-Photon Avalanche Diode (SPAD) Arrays. *Smith, J.A.*, +, *TNS May 2020 797-804*

Evaluation of Soft-Error Tolerance by Neutrons and Heavy Ions on Flip Flops With Guard Gates in a 65-nm Thin BOX FDSOI Process. *Ebara, M.*, +, *TNS July 2020 1470-1477*

Fabrication and First Characterization of Silicon-Based Full 3-D Microdosimeters. *Kok, A.*, +, *TNS Dec. 2020 2490-2500*

Modeling of Near Zero-Field Magnetoresistance and Electrically Detected Magnetic Resonance in Irradiated Si/SiO₂ MOSFETs. *Harmon, N.J.*, +, *TNS July 2020 1669-1673*

New Approach for Pulsed-Laser Testing That Mimics Heavy-Ion Charge Deposition Profiles. *Hales, J.M.*, +, *TNS Jan. 2020 81-90*

Observation of Radiation-Induced Leakage Current Defects in MOS Oxides With Multifrequency Electrically Detected Magnetic Resonance and Near-Zero-Field Magnetoresistance. *Moxim, S.J.*, +, *TNS Jan. 2020 228-233*

Phosphorus Versus Arsenic: Role of the Photodiode Doping Element in CMOS Image Sensor Radiation-Induced Dark Current and Random Telegraph Signal. *Le Roch, A.*, +, *TNS July 2020 1241-1250*

Polarization Dependence of Pulsed Laser-Induced SEEs in SOI FinFETs. *Ryder, L.D.*, +, *TNS Jan. 2020 38-43*

Radiation-Induced Variable Retention Time in Dynamic Random Access Memories. *Goiffon, V.*, +, *TNS Jan. 2020 234-244*

Reducing Soft Error Rate of SoCs Analog-to-Digital Interfaces With Design Diversity Redundancy. *Gonzalez, C.J.*, +, *TNS March 2020 518-524*

Response of Waveguide-Integrated Germanium-on-Silicon p-i-n Photodiodes to Neutron Displacement Damage. *Goley, P.S.*, +, *TNS Jan. 2020 296-304*

Sensitivity of Silicon Photomultipliers to Direct Gamma Ray Irradiation. *Lavelle, C.M.*, +, *TNS Jan. 2020 389-399*

TID Response of Bulk Si PMOS FinFETs: Bias, Fin Width, and Orientation Dependence. *Ren, Z.*, +, *TNS July 2020 1320-1325*

Total-Ionizing-Dose Effects, Border Traps, and 1/f Noise in Emerging MOS Technologies. *Fleetwood, D.M.*, *TNS July 2020 1216-1240*

Silicon carbide

Electron, Neutron, and Proton Irradiation Effects on SiC Radiation Detectors. *Rafi, J.M.*, +, *TNS Dec. 2020 2481-2489*

Silicon compounds

Combined Temperature and Radiation Effects on Radiation-Sensitive Single-Mode Optical Fibers. *Campanella, C.*, +, *TNS July 2020 1643-1649*

Comparison Between Silicon Carbide and Diamond for Thermal Neutron Detection at Room Temperature. *Obraztsova, O.*, +, *TNS May 2020 863-871*

Comparison of X-Ray and Electron Radiation Effects on Dark Current Non-Uniformity and Fluctuations in CMOS Image Sensors. *Le Roch, A.*, +, *TNS Jan. 2020 268-277*

Evaluation of Low Dose Silicon Carbide Temperature Monitors. *Davis, K.L.*, +, *TNS April 2020 585-591*

Experimental Study on Displacement Damage Effects of Anode-Short MOS-Controlled Thyristor. *Li, L.*, +, *TNS March 2020 508-517*

Heavy-Ion Microbeam Studies of Single-Event Leakage Current Mechanism in SiC VD-MOSFETs. *Martinella, C.*, +, *TNS July 2020 1381-1389*

Impact of Electrical Stress and Neutron Irradiation on Reliability of Silicon Carbide Power MOSFET. *Niskanen, K.*, +, *TNS July 2020 1365-1373*

Improved Model for Ionization-Induced Surface Recombination Current in p-n-p BJTs. *Li, L.*, +, *TNS Aug. 2020 1826-1834*

Inclusion of Radiation Environment Variability for Reliability Estimates for SiC Power MOSFETs. *Austin, R.A.*, +, *TNS Jan. 2020 353-357*

Investigation of Thermoluminescence Properties of Potential Fibered-OSL Dosimeter Materials. *Benabdesselam, M.*, +, *TNS July 2020 1663-1668*

Ion-Induced Energy Pulse Mechanism for Single-Event Burnout in High-Voltage SiC Power MOSFETs and Junction Barrier Schottky Diodes. *Ball, D.R.*, +, *TNS Jan. 2020 22-28*

Luminescent Nanocomposites for Biomedical Applications. *Popovich, K.*, +, *TNS June 2020 962-968*

Modeling of Near Zero-Field Magnetoresistance and Electrically Detected Magnetic Resonance in Irradiated Si/SiO₂ MOSFETs. *Harmon, N.J.*, +, *TNS July 2020 1669-1673*

Observation of Radiation-Induced Leakage Current Defects in MOS Oxides With Multifrequency Electrically Detected Magnetic Resonance and Near-Zero-Field Magnetoresistance. *Moxim, S.J.*, +, *TNS Jan. 2020 228-233*

Radiation Effects on WDM and DWDM Architectures of Pre-amplifier and Boost-Amplifier. *Aubry, M.*, +, *TNS Jan. 2020 278-283*

Radiation Resistance of Single-Mode Optical Fibers at $\lambda = 1.55 \mu\text{m}$ Under Irradiation at IVG.1M Nuclear Reactor. *Kashaykin, P.F.*, +, *TNS Oct. 2020 2162-2171*

Radiation-Hardened Sensor Interface Circuit for Monitoring Severe Accidents in Nuclear Power Plants. *Jeon, H.*, +, *TNS July 2020 1738-1745*

Remote Measurements of X-Rays Dose Rate Using a Cerium-Doped Air-Clad Optical Fiber. *Bahout, J.*, +, *TNS July 2020 1658-1662*

Steady-State X-Ray Radiation-Induced Attenuation in Canonical Optical Fibers. *De Michele, V.*, +, *TNS July 2020 1650-1657*

Total-Ionizing-Dose Effects and Low-Frequency Noise in 30-nm Gate-Length Bulk and SOI FinFETs With SiO₂/HfO₂ Gate Dielectrics. *Gorchichko, M.*, +, *TNS Jan. 2020 245-252*

Total-Ionizing-Dose Effects, Border Traps, and 1/f Noise in Emerging MOS Technologies. *Fleetwood, D.M.*, *TNS July 2020 1216-1240*

Unifying Concepts for Ion-Induced Leakage Current Degradation in Silicon Carbide Schottky Power Diodes. *Johnson, R.A.*, +, *TNS Jan. 2020 135-139*

Silicon germanium

Displacement Damage Effects Mitigation Approach for Heterojunction Bipolar Transistor Frequency Synthesizers. *Sotskov, D.I.*, +, *TNS Nov. 2020 2396-2404*

Silicon radiation detectors

⁶LiF:ZnS(Ag) Neutron Detector Performance Optimized Using Waveform Recordings and ROC Curves. *Pritchard, K.*, +, *TNS Jan. 2020 414-421*

- A Proton Sensor for Energies From 2 to 20 MeV. *Ruffenach, M.*, +, *TNS July 2020 1351-1359*
- A Solid-State Microdosimeter for Dose and Radiation Quality Monitoring for Astronauts in Space. *Peracchi, S.*, +, *TNS Jan. 2020 169-174*
- Characterizing High-Energy Ion Beams With PIPS Detectors. *Bagatin, M.*, +, *TNS July 2020 1421-1427*
- Comparison of Back-Thinned Detector Ultraviolet Quantum Efficiency for Two Commercially Available Passivation Treatments. *Heymes, J.*, +, *TNS Aug. 2020 1962-1967*
- Design and Characterization of the CLICTD Pixelated Monolithic Sensor Chip. *Kremastiotis, I.*, +, *TNS Oct. 2020 2263-2272*
- Design and Experimental Validation of an Integrated Multichannel Charge Amplifier for Solid-State Detectors With Innovative Spectroscopic Range Booster. *Capra, S.*, +, *TNS Aug. 2020 1877-1884*
- Development of a High-Rate Front-End ASIC for X-Ray Spectroscopy and Diffraction Applications. *Vernon, E.*, +, *TNS April 2020 752-759*
- Front-End Electronics for the SiPM-Readout Gaseous TPC for Neutrinoless Double-Beta Decay Search. *Nakamura, K.Z.*, +, *TNS July 2020 1772-1776*
- Neutron-Induced Radiation Damage in LYSO, BaF₂, and PWO Crystals. *Hu, C.*, +, *TNS June 2020 1086-1092*
- Phase I Upgrade of the Readout System of the Vertex Detector at the LHCb Experiment. *Fernandez Prieto, A.*, +, *TNS April 2020 732-739*
- Precision Timing in the CMS MTD Barrel Timing Layer With Crystal Bars and SiPMs. *Santanastasio, F.*, *TNS Sept. 2020 2105-2110*
- Sensitivity of Silicon Photomultipliers to Direct Gamma Ray Irradiation. *Lavelle, C.M.*, +, *TNS Jan. 2020 389-399*
- SLiT: A Strip-Sensor Readout Chip With Subnanosecond Time Walk for the J-PARC Muon $g - 2$ /EDM Experiment. *Kishishita, T.*, +, *TNS Sept. 2020 2089-2095*
- SOI Thin Microdosimeters for High LET Single-Event Upset Studies in Fe, O, Xe, and Cocktail Ion Beam Fields. *James, B.*, +, *TNS Jan. 2020 146-153*
- Study of the Deposited Energy Spectra in Silicon by High-Energy Neutron and Mixed Fields. *Cazzaniga, C.*, +, *TNS Jan. 2020 175-180*
- TERA: Throughput-Enhanced Readout ASIC for High-Rate Energy-Dispersive X-Ray Detection. *Hafizh, I.*, +, *TNS July 2020 1746-1759*
- The Mu2e e.m. Calorimeter: Crystals and SiPMs Production Status. *Atanov, N.*, +, *TNS June 2020 978-982*
- Timepix3 Luminosity Determination of 13-TeV Proton-Proton Collisions at the ATLAS Experiment. *Sopczak, A.*, *TNS April 2020 609-616*
- Silicon-on-insulator**
- A Solid-State Microdosimeter for Dose and Radiation Quality Monitoring for Astronauts in Space. *Peracchi, S.*, +, *TNS Jan. 2020 169-174*
- A Special Total-Ionizing-Dose-Induced Short Channel Effect in Thin-Film PDSOI Technology: Phenomena, Analyses, and Models. *Bi, D.*, +, *TNS Nov. 2020 2337-2344*
- Comparison of Single-Event Transients in SiGe HBTs on Bulk and Thick-Film SOI. *Ildefonso, A.*, +, *TNS Jan. 2020 71-80*
- DFF Layout Variations in CMOS SOI—Analysis of Hardening by Design Options. *Black, J.D.*, +, *TNS June 2020 1125-1132*
- Evaluation of Soft-Error Tolerance by Neutrons and Heavy Ions on Flip Flops With Guard Gates in a 65-nm Thin BOX FDSOI Process. *Ebara, M.*, +, *TNS July 2020 1470-1477*
- Impact of the Angle of Incidence on Negative Muon-Induced SEU Cross Sections of 65-nm Bulk and FDSOI SRAMs. *Liao, W.*, +, *TNS July 2020 1566-1572*
- Multiple Layout-Hardening Comparison of SEU-Mitigated Flip-Flops in 22-nm UTBB FD-SOI Technology. *Cai, C.*, +, *TNS Jan. 2020 374-381*
- New Approach for Pulsed-Laser Testing That Mimics Heavy-Ion Charge Deposition Profiles. *Hales, J.M.*, +, *TNS Jan. 2020 81-90*
- On-Chip Total Ionizing Dose Digital Monitor in Fully Depleted SOI Technologies. *Abouzeid, F.*, +, *TNS July 2020 1326-1331*
- Polarization Dependence of Pulsed Laser-Induced SEEs in SOI FinFETs. *Ryder, L.D.*, +, *TNS Jan. 2020 38-43*
- Radiation Hardened by Design Subsampling Phase-Locked Loop Techniques in PD-SOI. *Richards, E.W.*, +, *TNS June 2020 1144-1151*
- SOI Thin Microdosimeters for High LET Single-Event Upset Studies in Fe, O, Xe, and Cocktail Ion Beam Fields. *James, B.*, +, *TNS Jan. 2020 146-153*
- Spin-Transfer Torque Magnetic Tunnel Junction for Single-Event Effects Mitigation in IC Design. *Coi, O.*, +, *TNS July 2020 1674-1681*
- TID Response of Nanowire Field-Effect Transistors: Impact of the Back-Gate Bias. *Riffaud, J.*, +, *TNS Oct. 2020 2172-2178*
- TID-Induced Breakdown Voltage Degradation in Uniform and Linear Variable Doping SOI p-LDMOSFETs. *Shu, L.*, +, *TNS July 2020 1390-1394*
- TID-Induced OFF-State Leakage Current in Partially Radiation-Hardened SOI LDMOS. *Shu, L.*, +, *TNS June 2020 1133-1138*
- Total-Ionizing-Dose Effects and Low-Frequency Noise in 30-nm Gate-Length Bulk and SOI FinFETs With SiO₂/HfO₂ Gate Dielectrics. *Gorchichko, M.*, +, *TNS Jan. 2020 245-252*
- Ultralow Power Ionizing Dose Sensor Based on Complementary Fully Depleted MOS Transistors for Radiotherapy Application. *Alcalde Bessia, F.*, +, *TNS Oct. 2020 2217-2223*
- Silver**
- Characterization of Silver-Doped LiF Crystal Grown by Czochralski Technique for Dark Matter Search Application. *Pandey, I.R.*, +, *TNS June 2020 915-921*
- Silver-Doped LiI Crystal: A Sensitive Thermal Neutron Detector With Pulse Shape Discrimination. *Vuong, P.Q.*, +, *TNS Oct. 2020 2290-2294*
- Single event upsets**
- Experimental and Analytical Study of the Responses of Nanoscale Devices to Neutrons Impinging at Various Incident Angles. *Korkian, G.*, +, *TNS Nov. 2020 2345-2352*
- Special NSREC 2019 issue of the IEEE Transactions on Nuclear Science Editor Comments. *Fleetwood, D.*, +, *TNS Jan. 2020 7*
- Singular value decomposition**
- Modeling Aerial Gamma-Ray Backgrounds Using Non-negative Matrix Factorization. *Bandstra, M.S.*, +, *TNS May 2020 777-790*
- Software fault tolerance**
- Applying Compiler-Automated Software Fault Tolerance to Multiple Processor Platforms. *James, B.*, +, *TNS Jan. 2020 321-327*
- Error Detection and Mitigation of Data-Intensive Microprocessor Applications Using SIMD and Trace Monitoring. *Pena-Fernandez, M.*, +, *TNS July 2020 1452-1460*
- Improving Selective Fault Tolerance in GPU Register Files by Relaxing Application Accuracy. *Goncalves, M.M.*, +, *TNS July 2020 1573-1580*
- Sol-gel processing**
- Influence of Annealing Temperature on the Performance of Lu₂O₃:Eu³⁺ Nanowire Arrays Synthesized by Sol-Gel Method Using AAO Template. *Hu, Y.*, +, *TNS Aug. 2020 1899-1903*
- Investigation of Thermoluminescence Properties of Potential Fibered-OSL Dosimeter Materials. *Benabdesselam, M.*, +, *TNS July 2020 1663-1668*
- Remote Measurements of X-Rays Dose Rate Using a Cerium-Doped Air-Clad Optical Fiber. *Bahout, J.*, +, *TNS July 2020 1658-1662*
- Solar power**
- A Confident Configuration for an Environmental Radiation Monitoring System. *Hung, D.T.*, +, *TNS Oct. 2020 2224-2230*
- Solid scintillation detectors**
- ⁶LiF:ZnS(Ag) Neutron Detector Performance Optimized Using Waveform Recordings and ROC Curves. *Pritchard, K.*, +, *TNS Jan. 2020 414-421*
- A mm³ Fiber-Coupled Scintillator for In-Core Thermal Neutron Detection in CROCUS. *Vitulo, F.*, +, *TNS April 2020 625-635*
- A Photomultiplier With an AlGaN Photocathode and Microchannel Plates for BaF₂ Scintillator Detectors in Particle Physics. *Atanov, N.*, +, *TNS July 2020 1760-1764*
- Advances in High-Resolution Ultrafast Lu₃:Ce Scintillators for Fast Timing Applications. *Marshall, M.S.J.*, +, *TNS June 2020 969-973*
- Band Gap Variation and Trap Distribution in Transparent Garnet Scintillator Ceramics. *Wieczorek, H.*, +, *TNS Aug. 2020 1934-1945*
- Characterization of Uranium Ore Samples by HPGe Gamma-Ray Spectroscopy. *Marchais, T.*, +, *TNS April 2020 654-661*
- Comparison of Zr, Bi, Ti, and Ga as Metal Contacts in Inorganic Perovskite CsPbBr₃ Gamma-Ray Detector. *Pan, L.*, +, *TNS Oct. 2020 2255-2262*
- Crystal Fibers for the LHCb Calorimeter Upgrade. *Martinazzoli, L.*, *TNS June 2020 1003-1008*
- Determination of Uranium Enrichment Using a Plastic Scintillator. *Kim, Y.*, +, *TNS April 2020 592-598*

- Development of a 3-D Scintillator Detector for Compton Imaging Based on Laser Engraving. *Zhang, J.*, +, *TNS July 2020 1691-1698*
- Development of a Gd₂Si₂O₇ (GPS) Scintillator-Based Alpha Imaging Detector for Rapid Plutonium Detection in High-Radon Environments. *Morishita, Y.*, +, *TNS Oct. 2020 2203-2208*
- Development of Gamma-Ray Detector Arrays Consisting of Diced Eu-Doped SrI₂ Scintillator Arrays and TSV-MPPC Arrays. *Yoshino, M.*, +, *TNS June 2020 999-1002*
- Development of Tin-Based Single Crystal Scintillator for Double-Beta Decay Experiments. *Aryal, P.*, +, *TNS June 2020 922-926*
- Energy Resolution of Scintillators in Connection With Track Structure. *Gekhtin, A.*, +, *TNS June 2020 880-887*
- Growth and Scintillation Properties of a New Red-Emitting Scintillator Rb₂HfI₆ for the Fiber-Reading Radiation Monitor. *Kodama, S.*, +, *TNS June 2020 1055-1062*
- High-Resolution Gamma Spectrometry of a Plutonium Bearing Waste Drum With High-Energy Reaction-Induced Gamma Rays. *Bottau, V.*, +, *TNS April 2020 575-584*
- High-Resolution Thermal Neutron Imaging With ¹⁰Boron/CsI:Tl Scintillator Screen. *Miller, S.R.*, +, *TNS Aug. 2020 1929-1933*
- Irradiation Test of 65-nm Bulk SRAMs With DC Muon Beam at RCNP-MUSIC Facility. *Mahara, T.*, +, *TNS July 2020 1555-1559*
- Latest Progress on Advanced Bridgman Method-Grown K₂PtCl₆ Cubic Structure Scintillator Crystals. *Hawrami, R.*, +, *TNS June 2020 1020-1026*
- Light Yield and Timing Characteristics of Lu_{0.8}Gd_{2.2}(Al_{5-x}Ga_x)O₁₂:Ce,Mg Single Crystals. *Sakhong, O.*, +, *TNS Oct. 2020 2295-2299*
- Luminescence and Scintillation Properties of Mg²⁺-Codoped Lu_{0.6}Gd_{2.4}Al₂Ga₃O₁₂:Ce Single Crystal. *Chewpraditkul, W.*, +, *TNS June 2020 904-909*
- Measurement of the Anisotropic Response of the ZnWO₄ Crystal for Developing the Direction-Sensitive Dark Matter Detector. *Ichimura, K.*, +, *TNS June 2020 894-897*
- Modeling Aerial Gamma-Ray Backgrounds Using Non-negative Matrix Factorization. *Bandstra, M.S.*, +, *TNS May 2020 777-790*
- Monte Carlo Calculations of the Detection Efficiency of Composite Scintillator Arrays for Fast and Moderated Neutrons, and for Gamma-Ray Spectroscopy. *Derenzo, S.E.*, +, *TNS June 2020 888-893*
- Neutron Detection Module Based on Li-Glass Scintillator and Array of SiPMs. *Wengrowicz, U.*, +, *TNS April 2020 599-602*
- Neutron-Induced Radiation Damage in LYSO, BaF₂, and PWO Crystals. *Hu, C.*, +, *TNS June 2020 1086-1092*
- Onset of Fogging and Degradation in Polyvinyl Toluene-Based Scintillators. *Rose, P.B.*, +, *TNS July 2020 1765-1771*
- Optical and Scintillation Properties of Hf⁴⁺ Codoped SrI₂:Eu²⁺ Single Crystals. *Wang, S.*, +, *TNS June 2020 876-879*
- Optimization of the Charge Comparison Method for Multiradiation Field Using Various Measurement Systems. *Lynde, C.*, +, *TNS April 2020 679-687*
- Optimizing the Sensitivity of a GAGG:Ce-Based Thermal Neutron Detector. *Taggart, M.P.*, +, *TNS April 2020 603-608*
- Performance Assessment of Amplification and Discrimination Electronic Devices for Passive Neutron Measurements. *Ben Mosbah, M.*, +, *TNS April 2020 662-668*
- Performance Evaluation of Liquinert-Processed CeBr₃ Crystals Coupled With a Multipixel Photon Counter. *Otake, Y.*, +, *TNS June 2020 988-993*
- Performance of a Position-Sensitive Neutron Scintillation Detector Based on Silicon Photomultipliers. *Kumar, S.*, +, *TNS June 2020 1169-1174*
- Performance of High Stopping Power Bismuth-Loaded Plastic Scintillators for Radiation Portal Monitors. *O'Neal, S.*, +, *TNS April 2020 746-751*
- Precision Timing in the CMS MTD Barrel Timing Layer With Crystal Bars and SiPMs. *Santanastasio, F.*, *TNS Sept. 2020 2105-2110*
- Proton Light Yield of Fast Plastic Scintillators for Neutron Imaging. *Manfredi, J.J.*, +, *TNS Feb. 2020 434-442*
- Reducing NaI(Tl) Detector Spectrum Shift by Optimizing Pulse Integration Time. *Wei, Q.*, +, *TNS Feb. 2020 450-454*
- Remote Measurements of X-Rays Dose Rate Using a Cerium-Doped Air-Clad Optical Fiber. *Bahout, J.*, +, *TNS July 2020 1658-1662*
- Response of the BGO Calorimeter to Cosmic-Ray Nuclei in the DAMPE Experiment on Orbit. *Dai, H.T.*, +, *TNS June 2020 956-961*
- Scintillation Characteristics of Mg²⁺-Codoped Y_{0.8}Gd_{2.2}(Al_{5-x}Ga_x)O₁₂:Ce Single Crystals. *Chewpraditkul, W.*, +, *TNS June 2020 910-914*
- Scintillation Properties and Energy Transfer in (GdY)AlO₃:Ce³⁺ Perovskites With High Gd Content. *Kucera, M.*, +, *TNS June 2020 1049-1054*
- Scintillation Properties of Tetrafluoroaluminate Crystal. *Daniel, D.J.*, +, *TNS June 2020 898-903*
- Simulated X-Ray Radiographic Performance of a Bismuth-Loaded PVT Array. *Decker, A.W.*, +, *TNS Nov. 2020 2329-2336*
- Spatial Resolution of an Inorganic Crystal-Based Hard X-Ray Imager. *Hu, C.*, +, *TNS June 2020 1014-1019*
- Stimulated Recovery of the Radiation Damage in Lead Tungstate Crystals. *Orsich, P.*, +, *TNS June 2020 952-955*
- Study on the Time Response of a Barium Fluoride Scintillation Detector for Fast Pulse Radiation Detection. *Chen, X.*, +, *TNS Aug. 2020 1893-1898*
- Technical Attenuation Length Measurement of Plastic Scintillator Strips for the Total-Body J-PET Scanner. *Kaplon, u.*, *TNS Oct. 2020 2286-2289*
- The Mu2e e.m. Calorimeter: Crystals and SiPMs Production Status. *Atanov, N.*, +, *TNS June 2020 978-982*
- The Quenching Effect of BGO Crystals on Relativistic Heavy Ions in the DAMPE Experiment. *Wei, Y.*, +, *TNS June 2020 939-945*
- Thermal Neutron Discrimination Using a Novel Phoswich Detector of Gd₃Ga₃Al₂O₁₂:Ce,B and CsI:Tl Single Crystals. *Kalyani, .*, +, *TNS Nov. 2020 2415-2420*
- Time Resolution Measurements of EJ-232Q With Single- and Dual-Sided Readouts. *Wen, X.*, +, *TNS Sept. 2020 2081-2088*
- Tl₂ZrCl₆ and Tl₂HfCl₆ Intrinsic Scintillators for Gamma Rays and Fast Neutron Detection. *Bhattacharya, P.*, +, *TNS June 2020 1032-1034*
- X-Ray Detection Capabilities of Plastic Scintillators Incorporated With ZrO₂ Nanoparticles. *Toda, A.*, +, *TNS June 2020 983-987*
- Solid-state nuclear track detectors**
- A Solid-State Microdosimeter for Dose and Radiation Quality Monitoring for Astronauts in Space. *Peracchi, S.*, +, *TNS Jan. 2020 169-174*
- TERA: Throughput-Enhanced Readout ASIC for High-Rate Energy-Dispersive X-Ray Detection. *Hafizh, I.*, +, *TNS July 2020 1746-1759*
- Space charge**
- A Modified Steady-State Method for Space Charge-Limited Effect of SGEMP. *Chen, J.*, +, *TNS Nov. 2020 2353-2362*
- Effect of the Electric Field Strength on the Energy Resolution of Cr/CdTe/Pt Detectors. *Sklyarchuk, V.*, +, *TNS Nov. 2020 2439-2444*
- Monitoring Deep Dielectric Charging Effects in Space. *Yu, X.*, +, *TNS April 2020 716-721*
- Space radiation**
- Special NSREC 2019 issue of the IEEE Transactions on Nuclear Science Editor Comments. *Fleetwood, D.*, +, *TNS Jan. 2020 7*
- Space vehicle electronics**
- Design and Characterizations of the Radiation-Hardened XCR4C ASIC for X-Ray CCDs for Space Astronomical Applications. *Lu, B.*, +, *TNS June 2020 1175-1184*
- Design-of-Experiments and Monte-Carlo Methods in Upset Rate-Calculations. *Hansen, D.L.*, *TNS Jan. 2020 336-344*
- Dose Measurements and Simulations of the RADFETs Response Onboard the Alphasat CTTB Experiments. *Sampaio, J.M.*, +, *TNS Sept. 2020 2028-2033*
- Exploiting Transistor Folding Layout as RHBD Technique Against Single-Event Transients. *Aguiar, Y.Q.*, +, *TNS July 2020 1581-1589*
- Intercomparison of Ionizing Doses From Space Shielding Analyses Using MCNP, Geant4, FASTRAD, and NOVICE. *Jun, B.*, +, *TNS July 2020 1629-1636*
- Method for System-Level Testing of COTS Electronic Board Under High-Energy Heavy Ions. *de Bibikoff, A.*, +, *TNS Oct. 2020 2179-2187*
- Orbital Equivalence of Terrestrial Radiation Tolerance Experiments. *Logan, J.V.*, +, *TNS Nov. 2020 2382-2391*
- Space vehicles**
- Charging Monitor Aboard the Geostationary Satellite GK2A at 128.2° E Longitude. *Woo, J.*, +, *TNS April 2020 740-745*

- How Much Do Solar Cycle Variations Impact Long-Term Effect Predictions at LEO?. *Bourdarie, S., +, TNS Oct. 2020 2196-2202*
- Space-charge-limited conduction**
- Calculation of Characteristic Time of Space Charge Limited Effect of SGEMP. *Chen, J., +, TNS May 2020 818-822*
- Spacecraft charging**
- Monitoring Deep Dielectric Charging Effects in Space. *Yu, X., +, TNS April 2020 716-721*
- Special issues and sections**
- Special NSREC 2019 issue of the IEEE Transactions on Nuclear Science Editor Comments. *Fleetwood, D., +, TNS Jan. 2020 7*
- Spectroscopy**
- Impedance and Noise Closed-Form Model of Large-Area Integrated Resistors With High Stray Capacitance to be Used as Feedback Discharge Devices in Charge-Sensitive Preamplifiers for Nuclear Spectroscopy. *Capra, S., TNS April 2020 722-731*
- SPICE**
- Analysis of SET Propagation in a System in Package Point of Load Converter. *Rajkowski, T., +, TNS July 2020 1494-1502*
- Design Process for Synchrotron RF Cavities Loaded With Magnetic Ring Cores. *Klingbeil, H., +, TNS Jan. 2020 361-368*
- Spin coating**
- CsPbBr₃ Thin Films on LYSO:Ce Substrates. *Tomanova, K., +, TNS June 2020 933-938*
- Spontaneous fission**
- Performance Assessment of Amplification and Discrimination Electronic Devices for Passive Neutron Measurements. *Ben Mosbah, M., +, TNS April 2020 662-668*
- Sputtering**
- Design and Analytical Evaluation of a New Ion Collection Geometry for Improvement in Quantity and Quality of Product During Laser Isotope Separation. *Dikshit, B., +, TNS Dec. 2020 2465-2473*
- SRAM chips**
- A Radiation-Tolerant, Multigigabit Serial Link Based on FPGAs. *Giordano, R., +, TNS Aug. 2020 1852-1860*
- A Statistical Method for MCU Extraction Without the Physical-to-Logical Address Mapping. *Wang, X., +, TNS July 2020 1443-1451*
- Angular Sensitivity of Neutron-Induced Single-Event Upsets in 12-nm Fin-FET SRAMs With Comparison to 20-nm Planar SRAMs. *Kato, T., +, TNS July 2020 1485-1493*
- Data-Retention-Voltage-Based Analysis of Systematic Variations in SRAM SEU Hardness: A Possible Solution to Synergistic Effects of TID. *Kobayashi, D., +, TNS Jan. 2020 328-335*
- Evaluating Soft Core RISC-V Processor in SRAM-Based FPGA Under Radiation Effects. *de Oliveira, A.B., +, TNS July 2020 1503-1510*
- Evaluation of a COTS 65-nm SRAM Under 15 MeV Protons and 14 MeV Neutrons at Low VDD. *Rezaei, M., +, TNS Oct. 2020 2188-2195*
- Impact of the Angle of Incidence on Negative Muon-Induced SEU Cross Sections of 65-nm Bulk and FDSOI SRAMs. *Liao, W., +, TNS July 2020 1566-1572*
- Improving the Reliability of TMR With Nontriplicated I/O on SRAM FPGAs. *Cannon, M.J., +, TNS Jan. 2020 312-320*
- Inherent Uncertainty in the Determination of Multiple Event Cross Sections in Radiation Tests. *Franco, F.J., +, TNS July 2020 1547-1554*
- Irradiation Test of 65-nm Bulk SRAMs With DC Muon Beam at RCNP-MUSIC Facility. *Mahara, T., +, TNS July 2020 1555-1559*
- Measurement of Single-Event Upsets in 65-nm SRAMs Under Irradiation of Spallation Neutrons at J-PARC MLF. *Kuroda, J., +, TNS July 2020 1599-1605*
- New SEU Modeling Method for Calibrating Target System to Multiple Radiation Particles. *Caron, P., +, TNS Jan. 2020 44-49*
- Sensitive-Volume Model of Single-Event Latchup for a 180-nm SRAM Test Structure. *Wang, P., +, TNS Sept. 2020 2015-2020*
- Simulation and Measurements of Collimator Effects in Proton and Neutron Radiation Testing for Single-Event Effects. *Belanger-Champagne, C., +, TNS Jan. 2020 161-168*
- Single Event Upsets Under 14-MeV Neutrons in a 28-nm SRAM-Based FPGA in Static Mode. *Fabero, J.C., +, TNS July 2020 1461-1469*
- Single-Event Effects in Ground-Level Infrastructure During Extreme Ground-Level Enhancements. *Dyer, A., +, TNS June 2020 1139-1143*
- Single-Event Upset Tolerance Study of a Low-Voltage 13T Radiation-Hardened SRAM Bitcell. *Haran, A., +, TNS Aug. 2020 1803-1812*
- Statistical Method to Extract Radiation-Induced Multiple-Cell Upsets in SRAM-Based FPGAs. *Perez-Celis, A., +, TNS Jan. 2020 50-56*
- Thermal Neutron-Induced SEUs in the LHC Accelerator Environment. *Cecchetto, M., +, TNS July 2020 1412-1420*
- Thermal Neutron-Induced Single-Event Upsets in Microcontrollers Containing Boron-10. *Auden, E.C., +, TNS Jan. 2020 29-37*
- Transistor Width Effect on the Power Supply Voltage Dependence of α -SER in CMOS 6T SRAM. *Torrens, G., +, TNS May 2020 811-817*
- Understanding the Impact of Quantization, Accuracy, and Radiation on the Reliability of Convolutional Neural Networks on FPGAs. *Libano, F., +, TNS July 2020 1478-1484*
- Stainless steel**
- High-Temperature Measurements With a Fabry–Perot Extensometer. *Chey-mol, G., +, TNS April 2020 552-558*
- Statistical analysis**
- A Statistical Method for MCU Extraction Without the Physical-to-Logical Address Mapping. *Wang, X., +, TNS July 2020 1443-1451*
- An Update to MOBE-DIC Using Current Monitor Measurements From Galileo. *Hands, A.D.P., +, TNS Jan. 2020 181-190*
- Ionizing Radiation Effects Spectroscopy for Analysis of Single-Event Transients. *Loveless, T.D., +, TNS Jan. 2020 99-107*
- Modeling Aerial Gamma-Ray Backgrounds Using Non-negative Matrix Factorization. *Bandstra, M.S., +, TNS May 2020 777-790*
- Single Event Upsets Under 14-MeV Neutrons in a 28-nm SRAM-Based FPGA in Static Mode. *Fabero, J.C., +, TNS July 2020 1461-1469*
- Statistical models (nuclear)**
- Heavy Ion Nuclear Reaction Impact on SEE Testing: From Standard to Ultra-high Energies. *Wyrwoll, V., +, TNS July 2020 1590-1598*
- Stereo image processing**
- Proximity-Based Sensor Fusion of Depth Cameras and Isotropic Rad-Detectors. *Henderson, K., +, TNS May 2020 840-857*
- Stoichiometry**
- Energy Resolution of Scintillators in Connection With Track Structure. *Gek-tin, A., +, TNS June 2020 880-887*
- Modeling Photocathode Performance Using MedeA-VASP Simulation Software. *Williams, J.O.D., +, TNS Sept. 2020 1987-1992*
- Storage management chips**
- High-Energy Versus Thermal Neutron Contribution to Processor and Memory Error Rates. *Oliveira, D., +, TNS June 2020 1161-1168*
- Storage rings**
- Longitudinal and Transverse Measurement to Evaluate the Beam Impedance on a Ceramic Ring-Loaded Thin-Wall Vacuum Chamber in BRing at HIAF. *Zhu, G., +, TNS July 2020 1702-1709*
- Strain measurement**
- High-Temperature Measurements With a Fabry–Perot Extensometer. *Chey-mol, G., +, TNS April 2020 552-558*
- Strontium compounds**
- Development of Gamma-Ray Detector Arrays Consisting of Diced Eu-Doped SrI₂ Scintillator Arrays and TSV-MPPC Arrays. *Yoshino, M., +, TNS June 2020 999-1002*
- Substrates**
- Fabrication and First Characterization of Silicon-Based Full 3-D Microdosimeters. *Kok, A., +, TNS Dec. 2020 2490-2500*
- Superconducting particle detectors**
- Results on FPGA-Based High-Power Tube Amplifier Linearization at DESY. *Bellandi, A., +, TNS May 2020 762-767*
- Surface recombination**
- Improved Model for Ionization-Induced Surface Recombination Current in p-n-p BJTs. *Li, L., +, TNS Aug. 2020 1826-1834*
- Surface states**
- Modeling Photocathode Performance Using MedeA-VASP Simulation Software. *Williams, J.O.D., +, TNS Sept. 2020 1987-1992*
- Surface treatment**
- Reflectance of Silicon Photomultipliers at Vacuum Ultraviolet Wavelengths. *Lv, P., +, TNS Dec. 2020 2501-2510*

Switched capacitor networks

Design and Characterizations of the Radiation-Hardened XCR4C ASIC for X-Ray CCDs for Space Astronomical Applications. *Lu, B.*, +, *TNS June 2020 1175-1184*

Single-Event Upset Responses of Metal–Oxide–Metal Capacitors and Diodes Used in Bulk 65-nm CMOS Analog Circuits. *Xu, R.*, +, *TNS April 2020 698-707*

Synchronization

Clock-Centric Serial Links for the Synchronization of Distributed Readout Systems. *Calvet, D.*, *TNS Aug. 2020 1912-1919*

Phase Drift Compensating RF Link for Femtosecond Synchronization of E-XFEL. *Sikora, D.*, +, *TNS Sept. 2020 2136-2142*

Scalable Self-Adaptive Synchronous Triggering System in Superconducting Quantum Computing. *Sun, L.*, +, *TNS Sept. 2020 2148-2154*

Synchrotron radiation

Selective Isotope CT Imaging Based on Nuclear Resonance Fluorescence Transmission Method. *Ali, K.*, +, *TNS Aug. 2020 1976-1984*

Synchrotrons

Crystal Fibers for the LHCb Calorimeter Upgrade. *Martinazzoli, L.*, *TNS June 2020 1003-1008*

Design Process for Synchrotron RF Cavities Loaded With Magnetic Ring Cores. *Klingbeil, H.*, +, *TNS Jan. 2020 361-368*

Hexagonal Pad Multichannel Ge X-Ray Spectroscopy Detector Demonstrator: Comprehensive Characterization. *Tartoni, N.*, +, *TNS Aug. 2020 1952-1961*

Longitudinal and Transverse Measurement to Evaluate the Beam Impedance on a Ceramic Ring-Loaded Thin-Wall Vacuum Chamber in BRing at HIAF. *Zhu, G.*, +, *TNS July 2020 1702-1709*

Radiation Environment in the LHC Arc Sections During Run 2 and Future HL-LHC Operations. *Bilko, K.*, +, *TNS July 2020 1682-1690*

Results on FPGA-Based High-Power Tube Amplifier Linearization at DESY. *Bellandi, A.*, +, *TNS May 2020 762-767*

System-in-package

Analysis of SET Propagation in a System in Package Point of Load Converter. *Rajkowski, T.*, +, *TNS July 2020 1494-1502*

System-on-chip

Applying Compiler-Automated Software Fault Tolerance to Multiple Processor Platforms. *James, B.*, +, *TNS Jan. 2020 321-327*

Evaluating Soft Core RISC-V Processor in SRAM-Based FPGA Under Radiation Effects. *de Oliveira, A.B.*, +, *TNS July 2020 1503-1510*

Reducing Soft Error Rate of SoCs Analog-to-Digital Interfaces With Design Diversity Redundancy. *Gonzalez, C.J.*, +, *TNS March 2020 518-524*

Reliability Analysis of Ethernet-Based Solutions for Data Transmission in the CERN Radiation Environment. *Gnemmi, G.*, +, *TNS July 2020 1614-1622*

T**Table lookup**

Results on FPGA-Based High-Power Tube Amplifier Linearization at DESY. *Bellandi, A.*, +, *TNS May 2020 762-767*

X-Ray Fluorescence Imaging Based on CdTe Detector Array for Analysis of Various Materials. *Jo, A.*, +, *TNS Dec. 2020 2523-2534*

Technology CAD (electronics)

Comparison of Single-Event Transients in SiGe HBTs on Bulk and Thick-Film SOI. *Ildefonso, A.*, +, *TNS Jan. 2020 71-80*

Impact of Electrical Stress and Neutron Irradiation on Reliability of Silicon Carbide Power MOSFET. *Niskanen, K.*, +, *TNS July 2020 1365-1373*

Single-Event Transients in SiGe HBTs Induced by Pulsed X-Ray Microbeam. *Nergui, D.*, +, *TNS Jan. 2020 91-98*

TID-Induced OFF-State Leakage Current in Partially Radiation-Hardened SOI LDMOS. *Shu, L.*, +, *TNS June 2020 1133-1138*

Telegraphy

Wavelet Analysis of RTS Noise in CMOS Image Sensors Irradiated With High-Energy Photons. *Hendrickson, B.*, +, *TNS July 2020 1732-1737*

Tellurium alloys

Artifacts in High-Energy Compton Imaging With 3-D Position-Sensitive CdZnTe. *Shy, D.*, +, *TNS Aug. 2020 1920-1928*

Temperature measurement

Evaluation of Low Dose Silicon Carbide Temperature Monitors. *Davis, K.L.*, +, *TNS April 2020 585-591*

High-Temperature Measurements With a Fabry–Perot Extensometer. *Chey-mol, G.*, +, *TNS April 2020 552-558*

Radiation-Response of Fiber Bragg Gratings at Low Temperatures. *Morana, A.*, +, *TNS July 2020 1637-1642*

Temperature sensors

Performances of Radiation-Hardened Single-Ended Raman Distributed Temperature Sensors Using Commercially Available Fibers. *Morana, A.*, +, *TNS Jan. 2020 305-311*

Radiation-Response of Fiber Bragg Gratings at Low Temperatures. *Morana, A.*, +, *TNS July 2020 1637-1642*

Tensile testing

High-Temperature Measurements With a Fabry–Perot Extensometer. *Chey-mol, G.*, +, *TNS April 2020 552-558*

Tensors

Impact of Tensor Cores and Mixed Precision on the Reliability of Matrix Multiplication in GPUs. *Basso, P.M.*, +, *TNS July 2020 1560-1565*

Testing

Failure Analysis of Galaxy S7 Edge Smartphone Using Neutron Radiation. *Bak, G.*, +, *TNS Nov. 2020 2370-2381*

Thallium

High-Resolution Thermal Neutron Imaging With ¹⁰Boron/CsI:Tl Scintillator Screen. *Miller, S.R.*, +, *TNS Aug. 2020 1929-1933*

Thermal Neutron Discrimination Using a Novel Phoswich Detector of Gd₃Ga₃Al₂O₁₂:Ce,B and CsI:Tl Single Crystals. *Kalyani, .*, +, *TNS Nov. 2020 2415-2420*

Tl₂ZrCl₆ and Tl₂HfCl₆ Intrinsic Scintillators for Gamma Rays and Fast Neutron Detection. *Bhattacharya, P.*, +, *TNS June 2020 1032-1034*

Thallium compounds

Thermal Characterization of Tl₂LiYCl₆:Ce (TLYC). *Watts, M.M.*, +, *TNS March 2020 525-533*

Thermal expansion

High-Temperature Measurements With a Fabry–Perot Extensometer. *Chey-mol, G.*, +, *TNS April 2020 552-558*

Radiation Resistance of Single-Mode Optical Fibers at $\lambda = 1.55 \mu\text{m}$ Under Irradiation at IVG.1M Nuclear Reactor. *Kashaykin, P.F.*, +, *TNS Oct. 2020 2162-2171*

Thermocouples

Nuclear Heating Measurements by Gamma and Neutron Thermometers. *Van Nieuwenhove, R.*, +, *TNS Sept. 2020 2073-2080*

Thermoluminescence

Characterization of Silver-Doped LiF Crystal Grown by Czochralski Technique for Dark Matter Search Application. *Pandey, I.R.*, +, *TNS June 2020 915-921*

Gamma-Heating and Gamma Flux Measurements in the JSI TRIGA Reactor: Results and Prospects. *Gruel, A.*, +, *TNS April 2020 559-567*

Investigation of Thermoluminescence Properties of Potential Fibered-OSL Dosimeter Materials. *Benabdesselam, M.*, +, *TNS July 2020 1663-1668*

Thermoluminescent dosimeters

Gamma-Heating and Gamma Flux Measurements in the JSI TRIGA Reactor: Results and Prospects. *Gruel, A.*, +, *TNS April 2020 559-567*

Thermometers

Nuclear Heating Measurements by Gamma and Neutron Thermometers. *Van Nieuwenhove, R.*, +, *TNS Sept. 2020 2073-2080*

Thick films

Comparison of Single-Event Transients in SiGe HBTs on Bulk and Thick-Film SOI. *Ildefonso, A.*, +, *TNS Jan. 2020 71-80*

Thin films

CsPbBr₃ Thin Films on LYSO:Ce Substrates. *Tomanova, K.*, +, *TNS June 2020 933-938*

Thorium

Characterization of Uranium Ore Samples by HPGe Gamma-Ray Spectroscopy. *Marchais, T.*, +, *TNS April 2020 654-661*

Three-dimensional displays

Application of Binocular Stereo Vision in Radioactive Source Image Reconstruction and Multimodal Imaging Fusion. *Li, Y.*, +, *TNS Nov. 2020 2454-2462*

Development of a Position-Sensitive 4π Compton Camera Based on a Single Segmented Scintillator. *Lee, H.*, +, *TNS Dec. 2020 2511-2522*

Fabrication and First Characterization of Silicon-Based Full 3-D Microdosimeters. *Kok, A.*, +, *TNS Dec. 2020 2490-2500*

Three-dimensional integrated circuits

A Heavy-Ion Detector Based on 3-D NAND Flash Memories. *Bagatin, M.*, +, *TNS Jan. 2020 154-160*

Performance Study of the First 2-D Prototype of Vertically Integrated Pattern Recognition Associative Memory. *Deptuch, G.*, +, *TNS Sept. 2020 2111-2118*

Threshold voltage

A Special Total-Ionizing-Dose-Induced Short Channel Effect in Thin-Film PDSOI Technology: Phenomena, Analyses, and Models. *Bi, D.*, +, *TNS Nov. 2020 2337-2344*

Thyristors

A Radiation-Hardened Dual-Direction SCR Based on LDMOS for ESD Protection in the Extreme Radiation Environment. *Wu, M.*, +, *TNS April 2020 708-715*

Time measurement

Research and Verification on Real-Time Interpolated Timing Algorithm Based on Waveform Digitization. *Fan, Y.*, +, *TNS Oct. 2020 2246-2254*

Time projection chambers

Front-End Electronics for the SiPM-Readout Gaseous TPC for Neutrinoless Double-Beta Decay Search. *Nakamura, K.Z.*, +, *TNS July 2020 1772-1776*

Time resolved spectra

Mechanism Analysis of Proton Irradiation-Induced Increase of 3-dB Bandwidth of GaN-Based Microlight-Emitting Diodes for Space Light Communication. *Wang, L.*, +, *TNS July 2020 1360-1364*

Optical Properties of InGaN/GaN Multiple Quantum Well Structures Grown on GaN and Sapphire Substrates. *Jary, V.*, +, *TNS June 2020 974-977*

Study on the Time Response of a Barium Fluoride Scintillation Detector for Fast Pulse Radiation Detection. *Chen, X.*, +, *TNS Aug. 2020 1893-1898*

Timing jitter

Evaluation of an Operational Concept for Improving Radiation Tolerance of Single-Photon Avalanche Diode (SPAD) Arrays. *Smith, J.A.*, +, *TNS May 2020 797-804*

Tokamak devices

Study of the Data Acquisition System for ITER Divertor Neutron Flux Monitor Diagnostic. *Fedorov, V.A.*, +, *TNS April 2020 688-693*

Tools

Experimental and Analytical Study of the Responses of Nanoscale Devices to Neutrons Impinging at Various Incident Angles. *Korkian, G.*, +, *TNS Nov. 2020 2345-2352*

Total ionizing dose

Effect of Drift Length on Shifts in 400-V SOI LDMOS Breakdown Voltage Due to TID. *Shu, L.*, +, *TNS Nov. 2020 2392-2395*

Transceivers

Achieving Picosecond-Level Phase Stability in Timing Distribution Systems With Xilinx Ultrascale Transceivers. *Mendes, E.*, +, *TNS March 2020 473-481*

Clock-Centric Serial Links for the Synchronization of Distributed Readout Systems. *Calvet, D.*, *TNS Aug. 2020 1912-1919*

Transient response

Nonstable Latchups in CMOS ICs Under Pulsed Laser Irradiation. *Shvetsov-Shilovskiy, I.I.*, +, *TNS July 2020 1540-1546*

Transistor circuits

Total Dose Effects on Negative and Positive Low-Dropout Linear Regulators. *Privat, A.*, +, *TNS July 2020 1332-1338*

Transparency

Influence of Annealing Temperature on the Performance of $\text{Lu}_2\text{O}_3:\text{Eu}^{3+}$ Nanowire Arrays Synthesized by Sol-Gel Method Using AAO Template. *Hu, Y.*, +, *TNS Aug. 2020 1899-1903*

Trigger circuits

Design and Performance of Data Acquisition and Control System for the Muon g-2 Laser Calibration. *Mastroianni, S.*, +, *TNS May 2020 832-839*

Least Mean Squares Filters Suppressing the Radio-Frequency Interference in AERA Cosmic Ray Radio Detection. *Szadkowski, Z.*, *TNS Jan. 2020 405-413*

Tsunami

Unmanned Radiation-Monitoring System. *Cerba, S.*, +, *TNS April 2020 636-643*

Tungsten

Bulk Single Crystal Growth of W Co-Doped Ce:Gd₃Ga₅Al₂O₁₂ by Czochralski Method. *Ueno, M.*, +, *TNS June 2020 1045-1048*

Thermal Neutron-Induced Single-Event Upsets in Microcontrollers Containing Boron-10. *Auden, E.C.*, +, *TNS Jan. 2020 29-37*

Total-Ionizing-Dose Effects on InGaAs FinFETs With Modified Gate-stack. *Zhao, S.E.*, +, *TNS Jan. 2020 253-259*

Tunneling

Observation of Radiation-Induced Leakage Current Defects in MOS Oxides With Multifrequency Electrically Detected Magnetic Resonance and Near-Zero-Field Magnetoresistance. *Moxim, S.J.*, +, *TNS Jan. 2020 228-233*

Two-dimensional electron gas

High-Fluence Proton-Induced Degradation on AlGaIn/GaN High-Electron-Mobility Transistors. *Yue, S.*, +, *TNS July 2020 1339-1344*

Two-photon processes

Comparison of Sensitive Volumes Associated With Ion- and Laser-Induced Charge Collection in an Epitaxial Silicon Diode. *Ryder, K.L.*, +, *TNS Jan. 2020 57-62*

New Approach for Pulsed-Laser Testing That Mimics Heavy-Ion Charge Deposition Profiles. *Hales, J.M.*, +, *TNS Jan. 2020 81-90*

U

Ultraviolet detectors

A Photomultiplier With an AlGaIn Photocathode and Microchannel Plates for BaF₂ Scintillator Detectors in Particle Physics. *Atanov, N.*, +, *TNS July 2020 1760-1764*

Comparison of Back-Thinned Detector Ultraviolet Quantum Efficiency for Two Commercially Available Passivation Treatments. *Heymes, J.*, +, *TNS Aug. 2020 1962-1967*

Ultraviolet spectra

Comparison of Back-Thinned Detector Ultraviolet Quantum Efficiency for Two Commercially Available Passivation Treatments. *Heymes, J.*, +, *TNS Aug. 2020 1962-1967*

Influence of Annealing Temperature on the Performance of $\text{Lu}_2\text{O}_3:\text{Eu}^{3+}$ Nanowire Arrays Synthesized by Sol-Gel Method Using AAO Template. *Hu, Y.*, +, *TNS Aug. 2020 1899-1903*

Transient and Steady-State Radiation Response of Phosphosilicate Optical Fibers: Influence of H₂ Loading. *Girard, S.*, +, *TNS Jan. 2020 289-295*

Ultrafast Radiative Relaxation Processes in Multication Cross-Luminescence Materials. *Saaring, J.*, +, *TNS June 2020 1009-1013*

X-Ray Detection Capabilities of Plastic Scintillators Incorporated With ZrO₂ Nanoparticles. *Toda, A.*, +, *TNS June 2020 983-987*

Uranium

Characterization of Uranium Ore Samples by HPGe Gamma-Ray Spectroscopy. *Marchais, T.*, +, *TNS April 2020 654-661*

Performance Assessment of Amplification and Discrimination Electronic Devices for Passive Neutron Measurements. *Ben Mosbah, M.*, +, *TNS April 2020 662-668*

V

Vacancies (crystal)

F-Centers in BaBrI Single Crystal. *Shendrik, R.*, +, *TNS June 2020 946-951*

Observation of Radiation-Induced Leakage Current Defects in MOS Oxides With Multifrequency Electrically Detected Magnetic Resonance and Near-Zero-Field Magnetoresistance. *Moxim, S.J.*, +, *TNS Jan. 2020 228-233*

Phosphorus Versus Arsenic: Role of the Photodiode Doping Element in CMOS Image Sensor Radiation-Induced Dark Current and Random Telegraph Signal. *Le Roch, A.*, +, *TNS July 2020 1241-1250*

Role of Chemical Substitution in the Photoluminescence Properties of Cerium Samarium Tungstates $\text{Ce}_{(2-x)}\text{Sm}_x(\text{WO}_4)$ ($0 \leq x \leq 0.3$). *Derraji, K.*, +, *TNS April 2020 568-574*

Vacuum deposited coatings

Effects of High-Dose X-Ray Irradiation on the Hole Lifetime in Vacuum-Deposited Stabilized a-Se Photoconductive Films: Implications to the

Quality Control of a-Se Used in X-Ray Detectors. *Simonson, B.*, +, *TNS Nov. 2020 2445-2453*

Valence bands

Ultrafast Radiative Relaxation Processes in Multication Cross-Luminescence Materials. *Saaring, J.*, +, *TNS June 2020 1009-1013*

Variable structure systems

Integral Sliding Mode for Power Distribution Control of Advanced Heavy Water Reactor. *Desai, R.J.*, +, *TNS June 2020 1076-1085*

Visible spectra

Comparison of Back-Thinned Detector Ultraviolet Quantum Efficiency for Two Commercially Available Passivation Treatments. *Heymes, J.*, +, *TNS Aug. 2020 1962-1967*

Influence of Annealing Temperature on the Performance of $\text{Lu}_2\text{O}_3:\text{Eu}^{3+}$ Nanowire Arrays Synthesized by Sol-Gel Method Using AAO Template. *Hu, Y.*, +, *TNS Aug. 2020 1899-1903*

Irradiation Tests of Optical Fibers and Cables Devoted to Corium Monitoring in Case of a Severe Accident in a Nuclear Power Plant. *Cheyamol, G.*, +, *TNS April 2020 669-678*

Transient and Steady-State Radiation Response of Phosphosilicate Optical Fibers: Influence of H_2 Loading. *Girard, S.*, +, *TNS Jan. 2020 289-295*

Ultrafast Radiative Relaxation Processes in Multication Cross-Luminescence Materials. *Saaring, J.*, +, *TNS June 2020 1009-1013*

X-Ray Detection Capabilities of Plastic Scintillators Incorporated With ZrO_2 Nanoparticles. *Toda, A.*, +, *TNS June 2020 983-987*

Visualization

Failure Analysis of Galaxy S7 Edge Smartphone Using Neutron Radiation. *Bak, G.*, +, *TNS Nov. 2020 2370-2381*

VLSI

Exploiting Transistor Folding Layout as RHBD Technique Against Single-Event Transients. *Aguilar, Y.Q.*, +, *TNS July 2020 1581-1589*

Voltage regulators

Shunt Regulator for the Serial Powering of the ATLAS CMOS Pixel Detector Modules. *Habib, A.*, +, *TNS Feb. 2020 455-463*

Total Dose Effects on Negative and Positive Low-Dropout Linear Regulators. *Privat, A.*, +, *TNS July 2020 1332-1338*

Voltage-controlled oscillators

Displacement Damage Effects Mitigation Approach for Heterojunction Bipolar Transistor Frequency Synthesizers. *Sotskov, D.I.*, +, *TNS Nov. 2020 2396-2404*

Single-Event Effects Characterization of LC-VCO PLLs in a 28-nm CMOS Technology. *Zhang, Z.*, +, *TNS Sept. 2020 2042-2050*

W

Wavelength division multiplexing

Radiation Effects on WDM and DWDM Architectures of Preamplifier and Boost-Amplifier. *Aubry, M.*, +, *TNS Jan. 2020 278-283*

Wavelet transforms

Wavelet Analysis of RTS Noise in CMOS Image Sensors Irradiated With High-Energy Photons. *Hendrickson, B.*, +, *TNS July 2020 1732-1737*

Wide band gap semiconductors

A Photomultiplier With an AlGaIn Photocathode and Microchannel Plates for BaF_2 Scintillator Detectors in Particle Physics. *Atanov, N.*, +, *TNS July 2020 1760-1764*

Atmospheric Neutron Radiation Response of III-V Binary Compound Semiconductors. *Autran, J.*, +, *TNS July 2020 1428-1435*

Comparison Between Silicon Carbide and Diamond for Thermal Neutron Detection at Room Temperature. *Obratzsova, O.*, +, *TNS May 2020 863-871*

Comparison of Back-Thinned Detector Ultraviolet Quantum Efficiency for Two Commercially Available Passivation Treatments. *Heymes, J.*, +, *TNS Aug. 2020 1962-1967*

Comparison of X-Ray and Proton Irradiation Effects on the Characteristics of InGaIn/GaN Multiple Quantum Wells Light-Emitting Diodes. *Wang, L.*, +, *TNS July 2020 1345-1350*

Comparison of Zr, Bi, Ti, and Ga as Metal Contacts in Inorganic Perovskite CsPbBr_3 Gamma-Ray Detector. *Pan, L.*, +, *TNS Oct. 2020 2255-2262*

Heavy-Ion Microbeam Studies of Single-Event Leakage Current Mechanism in SiC VD-MOSFETs. *Martinella, C.*, +, *TNS July 2020 1381-1389*

High-Fluence Proton-Induced Degradation on AlGaIn/GaN High-Electron-Mobility Transistors. *Yue, S.*, +, *TNS July 2020 1339-1344*

Impact of Electrical Stress and Neutron Irradiation on Reliability of Silicon Carbide Power MOSFET. *Niskanen, K.*, +, *TNS July 2020 1365-1373*

Inclusion of Radiation Environment Variability for Reliability Estimates for SiC Power MOSFETs. *Austin, R.A.*, +, *TNS Jan. 2020 353-357*

Ion-Induced Energy Pulse Mechanism for Single-Event Burnout in High-Voltage SiC Power MOSFETs and Junction Barrier Schottky Diodes. *Ball, D.R.*, +, *TNS Jan. 2020 22-28*

Mechanism Analysis of Proton Irradiation-Induced Increase of 3-dB Bandwidth of GaN-Based Microlight-Emitting Diodes for Space Light Communication. *Wang, L.*, +, *TNS July 2020 1360-1364*

Modeling Photocathode Performance Using Medea-VASP Simulation Software. *Williams, J.O.D.*, +, *TNS Sept. 2020 1987-1992*

Optical Properties of InGaIn/GaN Multiple Quantum Well Structures Grown on GaN and Sapphire Substrates. *Jary, V.*, +, *TNS June 2020 974-977*

Photocurrent From Single Collision 14-MeV Neutrons in GaN and GaAs. *Jasica, M.J.*, +, *TNS Jan. 2020 221-227*

Scintillation Properties of $\beta\text{-Ga}_2\text{O}_3$ Single Crystal Excited by α -Ray. *He, N.*, +, *TNS Jan. 2020 400-404*

Total-Ionizing-Dose Effects, Border Traps, and $1/f$ Noise in Emerging MOS Technologies. *Fleetwood, D.M.*, *TNS July 2020 1216-1240*

Unifying Concepts for Ion-Induced Leakage Current Degradation in Silicon Carbide Schottky Power Diodes. *Johnson, R.A.*, +, *TNS Jan. 2020 135-139*

Wireless sensor networks

Radiation-Hardened Sensor Interface Circuit for Monitoring Severe Accidents in Nuclear Power Plants. *Jeon, H.*, +, *TNS July 2020 1738-1745*

Wood

CdZnTe-Based X-Ray Spectrometer for Absolute Density Determination. *Zambelli, N.*, +, *TNS Oct. 2020 2273-2277*

Wood processing

CdZnTe-Based X-Ray Spectrometer for Absolute Density Determination. *Zambelli, N.*, +, *TNS Oct. 2020 2273-2277*

Wood products

CdZnTe-Based X-Ray Spectrometer for Absolute Density Determination. *Zambelli, N.*, +, *TNS Oct. 2020 2273-2277*

Work function

Modeling Photocathode Performance Using Medea-VASP Simulation Software. *Williams, J.O.D.*, +, *TNS Sept. 2020 1987-1992*

X

X-ray apparatus

Hexagonal Pad Multichannel Ge X-Ray Spectroscopy Detector Demonstrator: Comprehensive Characterization. *Tartoni, N.*, +, *TNS Aug. 2020 1952-1961*

X-ray astronomy

Design and Characterizations of the Radiation-Hardened XCR4C ASIC for X-Ray CCDs for Space Astronomical Applications. *Lu, B.*, +, *TNS June 2020 1175-1184*

X-ray detection

A Partial-Volume Correction for Quantitative Spectral X-Ray Radiography. *Gillis, W.C.*, +, *TNS Nov. 2020 2321-2328*

Advances in High-Resolution Ultrafast Lu_3Ce Scintillators for Fast Timing Applications. *Marshall, M.S.J.*, +, *TNS June 2020 969-973*

Comparison of Back-Thinned Detector Ultraviolet Quantum Efficiency for Two Commercially Available Passivation Treatments. *Heymes, J.*, +, *TNS Aug. 2020 1962-1967*

Comparison of Zr, Bi, Ti, and Ga as Metal Contacts in Inorganic Perovskite CsPbBr_3 Gamma-Ray Detector. *Pan, L.*, +, *TNS Oct. 2020 2255-2262*

Development of a High-Rate Front-End ASIC for X-Ray Spectroscopy and Diffraction Applications. *Vernon, E.*, +, *TNS April 2020 752-759*

Effect of the Electric Field Strength on the Energy Resolution of Cr/CdTe/Pt Detectors. *Sklyarchuk, V.*, +, *TNS Nov. 2020 2439-2444*

Effects of High-Dose X-Ray Irradiation on the Hole Lifetime in Vacuum-Deposited Stabilized a-Se Photoconductive Films: Implications to the

Quality Control of a-Se Used in X-Ray Detectors. *Simonson, B.*, +, *TNS Nov. 2020 2445-2453*

Growth of Large-Area $\text{Cd}_{0.9}\text{Zn}_{0.1}\text{Te}$ Single Crystals and Fabrication of Pixelated Guard-Ring Detector for Room-Temperature γ -Ray Detection. *Sajjad, M.*, +, *TNS Aug. 2020 1946-1951*

Hybrid Multipixel Array X-Ray Detectors for Real-Time Direct Detection of Hard X-Rays. *Thirimanne, H.M.*, +, *TNS Oct. 2020 2238-2245*

Performance of Perovskite CsPbBr_3 Single Crystal Detector for Gamma-Ray Detection. *Pan, L.*, +, *TNS Feb. 2020 443-449*

Spatial Resolution of an Inorganic Crystal-Based Hard X-Ray Imager. *Hu, C.*, +, *TNS June 2020 1014-1019*

TERA: Throughput-Enhanced Readout ASIC for High-Rate Energy-Dispersive X-Ray Detection. *Hafizh, I.*, +, *TNS July 2020 1746-1759*

X-Ray Detection Capabilities of Plastic Scintillators Incorporated With ZrO_2 Nanoparticles. *Toda, A.*, +, *TNS June 2020 983-987*

X-ray diffraction

Crystal Growth and Scintillation Properties of Carbazole for Neutron Detection. *Yamaji, A.*, +, *TNS June 2020 1027-1031*

Role of Chemical Substitution in the Photoluminescence Properties of Cerium Samarium Tungstates $\text{Ce}_{(2-x)}\text{Sm}_x(\text{WO}_4)_3$ ($0 \leq x \leq 0.3$). *Derraji, K.*, +, *TNS April 2020 568-574*

Scintillation Properties of Tetrafluoroaluminate Crystal. *Daniel, D.J.*, +, *TNS June 2020 898-903*

X-ray effects

Comparison of X-Ray and Electron Radiation Effects on Dark Current Non-Uniformity and Fluctuations in CMOS Image Sensors. *Le Roch, A.*, +, *TNS Jan. 2020 268-277*

Effects of High-Dose X-Ray Irradiation on the Hole Lifetime in Vacuum-Deposited Stabilized a-Se Photoconductive Films: Implications to the Quality Control of a-Se Used in X-Ray Detectors. *Simonson, B.*, +, *TNS Nov. 2020 2445-2453*

Radiation Effects on WDM and DWDM Architectures of Preamplifier and Boost-Amplifier. *Aubry, M.*, +, *TNS Jan. 2020 278-283*

Steady-State X-Ray Radiation-Induced Attenuation in Canonical Optical Fibers. *De Michele, V.*, +, *TNS July 2020 1650-1657*

Total-Ionizing-Dose Effects on InGaAs FinFETs With Modified Gate-stack. *Zhao, S.E.*, +, *TNS Jan. 2020 253-259*

Transient and Steady-State Radiation Response of Phosphosilicate Optical Fibers: Influence of H_2 Loading. *Girard, S.*, +, *TNS Jan. 2020 289-295*

X-ray fluorescence analysis

Compton Background Elimination for in Vivo X-Ray Fluorescence Imaging of Gold Nanoparticles Using Convolutional Neural Network. *Jung, S.*, +, *TNS Nov. 2020 2311-2320*

Hexagonal Pad Multichannel Ge X-Ray Spectroscopy Detector Demonstrator: Comprehensive Characterization. *Tartoni, N.*, +, *TNS Aug. 2020 1952-1961*

X-ray imaging

Advances in High-Resolution Ultrafast $\text{LuI}_3:\text{Ce}$ Scintillators for Fast Timing Applications. *Marshall, M.S.J.*, +, *TNS June 2020 969-973*

Detector Upgrade for Fast MeV X-Ray Imaging for Severe Accidents Experiments. *Tisseur, D.*, +, *TNS July 2020 1715-1721*

Effects of High-Dose X-Ray Irradiation on the Hole Lifetime in Vacuum-Deposited Stabilized a-Se Photoconductive Films: Implications to the

Quality Control of a-Se Used in X-Ray Detectors. *Simonson, B.*, +, *TNS Nov. 2020 2445-2453*

High-Resolution Thermal Neutron Imaging With $^{10}\text{Boron}/\text{CsI}:\text{TI}$ Scintillator Screen. *Miller, S.R.*, +, *TNS Aug. 2020 1929-1933*

Spatial Resolution of an Inorganic Crystal-Based Hard X-Ray Imager. *Hu, C.*, +, *TNS June 2020 1014-1019*

X-Ray Fluorescence Imaging Based on CdTe Detector Array for Analysis of Various Materials. *Jo, A.*, +, *TNS Dec. 2020 2523-2534*

X-ray optics

Theoretical Simulation of X-Ray Transmission Through a Polycapillary X-Ray Lens With a Variable Capillary Radius. *Wang, X.*, +, *TNS May 2020 791-796*

X-ray spectrometers

A Partial-Volume Correction for Quantitative Spectral X-Ray Radiography. *Gillis, W.C.*, +, *TNS Nov. 2020 2321-2328*

X-ray spectroscopy

CdZnTe-Based X-Ray Spectrometer for Absolute Density Determination. *Zambelli, N.*, +, *TNS Oct. 2020 2273-2277*

Development of a High-Rate Front-End ASIC for X-Ray Spectroscopy and Diffraction Applications. *Vernon, E.*, +, *TNS April 2020 752-759*

Hexagonal Pad Multichannel Ge X-Ray Spectroscopy Detector Demonstrator: Comprehensive Characterization. *Tartoni, N.*, +, *TNS Aug. 2020 1952-1961*

TERA: Throughput-Enhanced Readout ASIC for High-Rate Energy-Dispersive X-Ray Detection. *Hafizh, I.*, +, *TNS July 2020 1746-1759*

X-rays

Single-Event Transients in SiGe HBTs Induced by Pulsed X-Ray Microbeam. *Nergui, D.*, +, *TNS Jan. 2020 91-98*

Xenon

Front-End Electronics for the SiPM-Readout Gaseous TPC for Neutrinoless Double-Beta Decay Search. *Nakamura, K.Z.*, +, *TNS July 2020 1772-1776*

Y

Ytterbium

Radiation Effects on WDM and DWDM Architectures of Preamplifier and Boost-Amplifier. *Aubry, M.*, +, *TNS Jan. 2020 278-283*

Yttrium compounds

Thermal Characterization of $\text{Tl}_2\text{LiYCl}_6:\text{Ce}$ (TLYC). *Watts, M.M.*, +, *TNS March 2020 525-533*

Z

Zinc alloys

Artifacts in High-Energy Compton Imaging With 3-D Position-Sensitive CdZnTe. *Shy, D.*, +, *TNS Aug. 2020 1920-1928*

Zinc compounds

CdZnTe-Based X-Ray Spectrometer for Absolute Density Determination. *Zambelli, N.*, +, *TNS Oct. 2020 2273-2277*

Comparison of Zr, Bi, Ti, and Ga as Metal Contacts in Inorganic Perovskite CsPbBr_3 Gamma-Ray Detector. *Pan, L.*, +, *TNS Oct. 2020 2255-2262*